PERIODICAL ROOM
GENERAL LIBRARY
UNIV. OF MICH.
OCT 2 1940

Journal of the History of Ideas

ARTICLES

Science and Criticism in the Neo-Classical Age of English Literature . . . . . *Richard F. Jones*

Gresham College: Precursor of the Royal Society *Francis R. Johnson*

Lotze's Influence on the Pragmatism of William James . . . . . *Otto Kraushaar*

Isolationism: A Case-History. *Frederick H. Cramer*

DISCUSSION

A Problem in the History of Ideas *Frederick J. E. Teggart*

NOTES AND DOCUMENTS

The Rise of English Nationalism . . *Kemp Malone*

BOOK REVIEW

Dilthey on German History and Historians *Horace L. Friess*

October, 1940

Volume I
Number 4

Journal of the History of Ideas

BOARD OF EDITORS

Editor

ARTHUR O. LOVEJOY
Johns Hopkins University

Associate Editors

CRANE BRINTON
History, Harvard University

GILBERT CHINARD
Modern Languages and Literatures, Princeton University

MORRIS R. COHEN
Philosophy, City College of New York and University of Chicago

FRANCIS W. COKER
History of Political Theory, Yale University

RICHARD P. McKEON
Philosophy and Medieval Thought, University of Chicago

PERRY MILLER
American Literary History, Harvard University

MARJORIE H. NICOLSON
History of English Literature, Smith College

JOHN HERMAN RANDALL, JR.
History of Philosophy, Columbia University

J. SALWYN SCHAPIRO
History, City College of New York

LOUIS B. WRIGHT
Renaissance Literature, Huntington Library, California

Managing Editor
PHILIP P. WIENER
City College of New York

Assistant Editor
JOSEPH T. SHIPLEY

Office of Publication
N. Queen St. and McGovern Ave., Lancaster, Pa.

All communications for publication should be sent to the Managing Editor, JOURNAL OF THE HISTORY OF IDEAS, City College, Convent Ave. & 139th St., N. Y. C. Self-addressed envelopes with return postage should accompany all manuscripts submitted. Contributors of articles will receive *gratis* 25 reprints if ordered when proofs are returned.

Subscription rates (domestic): $4 for one year, $7 for two years, $10 for three years, $1.25 for single copy; *foreign rates:* $4.50 for one year, $8 for two years, $11 for three years, $1.50 for single copy. *Back numbers* will be charged at rate for one year. *New subscriptions and renewals* are entered to begin with the first number of current volume unless the order specifies otherwise. *Notice of change of address* must be received at least two weeks in advance of issue for proper mailing. Claims for copies lost in the mails must be received within 30 days (foreign 90 days) of date of issue. All such communications should be sent to the office of the Managing Editor, JOURNAL OF THE HISTORY OF IDEAS.

The JOURNAL will appear four times a year: Winter Issue in January, Spring Issue in April, Summer Issue in June, and Fall Issue in October.

Entered as second-class matter January 24, 1940, at the post office at Lancaster, Pennsylvania, under the Act of March 3, 1879.

Journal of the History of Ideas

Edited by Arthur O. Lovejoy

in association with

Crane C. Brinton
Gilbert Chinard
Morris R. Cohen
Francis W. Coker
Richard P. McKeon
Perry Miller
Marjorie H. Nicolson
John Herman Randall, Jr.
J. Salwyn Schapiro
Louis B. Wright

Managing Editor:
Philip P. Wiener

Assistant Editor:
Joseph T. Shipley

VOLUME I, NUMBER 4
OCTOBER
1940

Lancaster, Pa., and New York
Journal of the History of Ideas, Inc.
College of the City of New York
1940

Journal of the History of Ideas

VOLUME I OCTOBER 1940 NUMBER 4

TABLE OF CONTENTS

ARTICLES

PAGE

Science and Criticism in the Neo-Classical Age of English Literature *Richard F. Jones* 381

Gresham College: Precursor of the Royal Society *Francis R. Johnson* 413

Lotze's Influence on the Pragmatism and Practical Philosophy of William James *Otto Kraushaar* 439

Isolationism: A Case History *Frederick H. Cramer* 459

DISCUSSION

A Problem in the History of Ideas *F. J. E. Teggart* 494

NOTES AND DOCUMENTS

The Rise of English Nationalism *Kemp Malone* 504

Announcement: Symposium on Romanticism 505

BOOK REVIEW

Dilthey on German History and Historians *Horace L. Friess* 506

BOOKS RECEIVED 509

PERIODICALS AND REPRINTS RECEIVED 513

CONTENTS OF VOLUME I 514

ANALYTICAL INDEX 516

NAME INDEX 520

VOLUME I, NUMBER 4 OCTOBER, 1940

SCIENCE AND CRITICISM IN THE NEO-CLASSICAL AGE OF ENGLISH LITERATURE

BY RICHARD F. JONES

Before proceeding to the substance of my argument, it is imperative that I define the first term in my title, for upon my interpretation of it the thesis which I shall present depends. My conception of the history of science in seventeenth-century England differs in many respects from the usual view. The modern historian of science develops his subject in a series of descriptions and evaluations of past discoveries in a more or less chronological order, in which continuity is at best only partially maintained. He may trace the progress of the knowledge of some aspect of nature from its embryonic beginnings to its finished statement. He may, for instance, explain Copernicus's theory of the revolution of the planets round the sun, tell how Kepler determined the elliptical nature of their orbits, show how Galileo advanced the theory by his observation of the satellites of Jupiter, and discuss the laws governing planetary movements as discovered by Newton. He may show how our present knowledge of nature is only the sum of all the increments added at various times in the past to growing conceptions, and describe each increment as it appears. He is primarily interested in positive contributions to knowledge, and in the appearance of those elements that have finally been welded into the elaborate scientific method of today.

There is another way of interpreting scientific history, which considers science primarily as a movement of ideas, which stresses principles giving rise to discoveries more than the discoveries themselves, and seeks to trace these principles as they develop in harmony or conflict with other forces and in relation to contemporary circumstances and needs. In seventeenth-century England the scientific movement comprised a few definite main principles. First was the demand for a sceptical mind, freed from all preconceptions and maintaining a critical attitude toward all ideas presented to it. Second, observation and experimentation were insisted upon as the only trustworthy means of securing sufficient data. And third, the inductive method of reasoning was to be employed on these data. Such were the central or primary ideas in this thought-movement,

or, to use an expression borrowed from criticism, the timeless element, for they are as true today—though, perhaps, more generally taken for granted—as they were then. But besides these there was the time element, or those secondary principles which came into being when the primary clashed with their age. To establish experimental science it was necessary to overthrow the principle of authority, especially that of Aristotle and other ancients, who in large part still dominated the human mind. So the anti-authoritarian principle entered the movement. But to undermine the authority of antiquity, it was necessary to attack a prevailing theory of the day, which asserted that modern times represented the old age of the world and the last stages of the decay of nature, in which human powers had degenerated to a level far below those of the ancients, who lived when nature was in its prime. Thus opposition to the theory of nature's decay joins the other principles. Again, the new thinkers, in order to have the opportunity to advance the cause of modern science, found it necessary to insist upon freedom to investigate and to advance their findings against established ideas. So the principle of liberty is insisted upon. And finally, the belief that knowledge could advance if the authority of the ancients were removed, and the realization that some discoveries had already shown the possibility of advancement beyond the ignorance of antiquity, moved the scientists to embrace the idea of progress.

All these values, attitudes, and ideas, together with a few others, combined to form the scientific movement, and they were expressed by an ever-increasing chorus of voices throughout the latter half of the seventeenth century, voices not of authentic scientists only, or even chiefly, but of noblemen, state officials, clergymen, and even of the rabble of magicians, astrologers, graceless quacks, and other representatives of the lunatic fringe. Of the four men who probably did more than any others to establish and popularize the idea of the new science, only one, Robert Boyle, was an authentic scientist. John Webster was a Puritan chaplain in the parliamentarian army; Joseph Glanvill was a rector in the Anglican Church; and Thomas Sprat was a noted preacher and later bishop of Rochester. All these men were ardent champions of the great discoveries of the Renaissance, but they were not primarily interested in these discoveries. Their first concern was to promote the idea of science, to support and give impetus to a thought-movement which

was sweeping away all obstructions. Toward this end they appreciated scientific discoveries not so much for their intrinsic value as for the support they furnished the movement, either in proving the ideas of the ancients erroneous or in demonstrating the fruitfulness of the experimental and observational method. One other fact must be briefly stated. The scientific movement was organized around Bacon, and its chief embodiment was the Royal Society.[1]

Paralleling the rapid development of the scientific movement was a literary movement, which comprised values and attitudes quite different from those of science. This was a literary criticism, generally called neo-classical, of which the two cardinal principles were the imitation of nature and the moral purpose of art. Since, however, as Pope was to say, nature and Homer were the same, the only way to imitate nature was by following the literary rules and ideas first laid down by Aristotle, Horace, and others, and later elaborated by European critics. Therefore, this criticism maintained that the proper models of writing were to be found only in Greek and Roman literature; that modern writers must follow these models; and that the rules drawn from them by Aristotle and his followers were as the law of the Medes and Persians which altereth not. Here, then, was a critical philosophy which upheld the principle of authority (though many critics tried to equate it with reason or common sense), limited the freedom of the poetic imagination, and rendered impossible any progress beyond the achievements of the past. It also lent its support to the theory of nature's decay, which indeed became one of its major theses. It would be difficult to find a more exact antithesis to the views characteristic of the scientific movement than is found in this criticism. Was it possible for these two thought-movements to proceed side by side without any interaction?

I

To ascertain the answer to this question it is necessary to examine the works of some representative critics of the neo-classical period. The first is Dryden, called by some the father of English

[1] This analysis of the scientific movement in seventeenth-century England is based upon the present writer's *Ancients and Moderns: A Study of the Background of the Battle of the Books* (Washington University Studies—New Series. St. Louis, 1936); Bacon's relationship to the movement is discussed in the introduction to an edition of selections from the works of Sir Francis Bacon (Doubleday, Doran & Co., N. Y., 1937).

criticism and certainly head and shoulders above any English critic of the time. But, if we may employ the words with which he himself described Shakespeare, "he is the very Janus of critics; he wears almost everywhere two faces; and you have scarce begun to admire the one, ere you despise the other." Whenever Dryden passes under the shadow of a French neo-classical critic, he may become as hidebound and narrow as any of his contemporaries. At other times, however, he reveals a critical intelligence of a high order—a sensitivity, insight, and comprehension unique in his own age and not often surpassed since. His mind, if at times too subject to influence, was tentative and sceptical, a characteristic of which he was fully aware, for, in speaking of his translation of Lucretius, he says, "I laid by my natural diffidence and scepticism for a while, to take up the dogmatical way of Lucretius."[2] But if this sceptical, undogmatic attitude of mind was his by nature, it was also, perhaps, fostered and encouraged by his contacts with the scientists of his day. He joined the Royal Society in the year it received its charter from the King, served on two of its committees, and praised and defended it in his poetry.[3] The critical, sceptical attitude which Bacon had enjoined upon his followers, and which the scientists of the Restoration sedulously strove to attain, could hardly have escaped his notice or been without influence upon him. In describing the spirit which informs his first important critical treatise, The *Essay of Dramatic Poesie,* he denies the charge of dogmatism, which had unjustly been brought against him: "my whole discourse was sceptical, according to that way of reasoning which was used by Socrates, Plato, and all the Academies of old, . . . and which is imitated by the modest inquisitions of the Royal Society."[4] Needless to say, the Society to which Dryden belonged, and to the members of which he had frequently listened, must have done more to develop the scepticism he speaks of than the far-off models of antiquity.

[2] *Essays of John Dryden,* ed. W. P. Ker, 1900, I, 260. This work is hereafter referred to under the name of the editor.

[3] In "John Dryden and the Royal Society" (*PMLA,* XLV (1930), 967–976), Mr. Claude Lloyd attempts to show that Dryden possessed no genuine interest in the Royal Society, but he has been convincingly answered by Miss Ella Riske, Professor Louis Bredvold, and Mr. T. B. Stroup. (*Ibid.,* XLVI (1931), 951–961). For a wider discussion of Dryden's scepticism see Bredvold's *The Intellectual Milieu of John Dryden,* and "Dryden, Hobbes, and the Royal Society," *Modern Philology,* XXV, 417–438.

[4] Ker, I, 124.

Not only is the sceptical attitude of science perceptible in Dryden's criticism; its corollary, the inductive way of reasoning, can frequently be discovered there. The method of reasoning employed by the dogmatic critics of his day was essentially deductive or syllogistic. They reasoned from general principles established largely by authority. Dryden, on the other hand, gathers his data from literature, and from these data draws his conclusions. A few simple examples will suffice. The dogmatic critic reasoned thus: poetry is an imitation of nature (a major premise resting ultimately on the authority of Aristotle); the supernatural is not an imitation of nature; therefore, poetry containing it is not correct poetry. But notice how Dryden opposes this narrow idea: "I will ask any man who loves heroic poetry . . . if the ghost of *Polydorus* in Virgil, the Enchanted Wood in Tasso, and the *Bower of Bliss* in Spenser . . . could have been omitted without taking from their works some of the greatest beauties in them." From these instances Dryden draws the general principle that

> an heroic poet is not tied to a bare representation of what is true . . . but . . . he may let himself loose to visionary objects, and to the representation of such things as depending not on sense, and therefore not to be comprehended by knowledge, may give him a freer scope for imagination.[5]

In searching for pertinent data in literature itself, and in drawing from the particular instances found in the three poets mentioned above a principle quite different from that which was founded on authority, Dryden was following, though in a simple and elementary fashion, exactly the same procedure adopted by the experimental scientists who turned their backs on Aristotelian ideas of nature and the syllogistic logic of the Peripatetics, and sought in nature itself the data which by induction would lead to more accurate ideas or principles.

Another example of this inductive method of arriving at conclusions quite at variance with accepted rules, is found in his preface to the *Mock Astrologer,* in which he combats the idea that poetic justice is a law of comedy. To support his own view he gathers his instances from Terence, Ben Jonson, and Beaumont and Fletcher.[6] Of course, simple induction is a seemingly obvious procedure, but nevertheless strict neo-classical critics like Thomas

[5] *Ibid.,* I, 153.

[6] *Ibid.,* I, 141–142.

Rymer seldom, if ever, employ it to determine their principles, but apply rules secured in other ways to particular poems, generally with disastrous consequences. Moreover, there are passages in Dryden which indicate that he was aware of the nature of the logic he used, for he definitely calls his reasoning induction.[7] In general, we may say that when not in his neo-classical moods, Dryden moves about in literature and collects the data for his opinions; he does not approach it from the outside with a pre-manufactured yardstick to detect its shortcomings.

Dryden, when in the presence of a French critic, can knuckle under to authority in the most approved fashion. But when the influence of the scientific spirit plays upon his mind, he is boldly defiant. When accused of not respecting the authority of Ben Jonson, he asks: "Why should there be any *Ipse dixit* in our poetry, any more than there is in our philosophy?" (It is necessary to keep in mind that throughout this period the word "philosophy" is consistently used where we should use the term "science.") And in another passage he declares that there are no Pillars of poetry, a figure taken from the Pillars of Hercules, which was used over and over again by the scientists to express the limits imposed on knowledge by the authority of the ancients.[8]

The idea of progress in scientific knowledge, which stimulated the scientists in their experimenting and observing, creates in Dryden a similar attitude toward poetry. One of the speakers in the *Essay of Dramatic Poesie* asks:

> Is it not evident in these last hundred years (when the study of philosophy has been the business of all Virtuosi in Christendom), that almost a new Nature has been revealed to us?—that more errors of the school have been detected, more useful experiments in philosophy have been made, more noble secrets in optics, medicine, anatomy, discovered, than in all those doting ages from Aristotle to us?—so true it is, that nothing spreads more fast than science, when rightly and generally cultivated.

To this another speaker, who wishes to show that modern poetry may go beyond ancient art, answers: "If natural causes be more known now than in the time of Aristotle, because more studied, it follows that poesy and other arts, may, with the same pains, arrive

[7] *Ibid.*, I, 195; II, 250.

[8] *Ibid.*, I, 138; II, 149. *Cf.* Richard F. Jones, *Ancients and Moderns*, p. 302, note 23.

still nearer to perfection.'"[9] In another passage, Dryden shows us one way in which he would contribute to the advancement of poetry, and also the reasons for his hope of success. What he advocates is the introduction of the supernatural element of guardian spirits into modern epic poetry, concerning which he says:

> I am sufficiently sensible of my weakness, and it is not very probable that I should succeed in such a project where of I have not had the least hint from any of my predecessors, the poets. . . . Yet we see the art of war is improved in sieges, and new instruments of death are invented daily; something new in philosophy and the mechanics is discovered almost every year; and the science of former ages is improved by the succeeding.[10]

The progress which the scientists were achieving inspired in Dryden the desire and hope of a similar advancement in verse. In fact, in one essay he makes this progress the sole aim of his criticism, and to achieve it he is quite willing to remove the bar of ancient authority and supposed perfection:

> I hope I shall not be thought arrogant when I enquire into their errors [*i.e.*, the errors of the ancients]. For we live in an age so sceptical, that as it determines little, so it takes little from antiquity on trust; and I profess to have no other ambition in this Essay, than that poetry may not go backward, when all other arts and sciences are advancing.[11]

It was the scientists who were sceptical and took nothing from antiquity on trust, and it was from them and their discoveries that Dryden took his cue.

There are numerous echoes and suggestions of the scientific movement in Dryden's criticism which hardly merit consideration here. His figures of speech are frequently drawn from the activities of science—mathematical, astronomical, chemical, physical, and medical.[12] He was especially fond of illustrations drawn from the Copernican system, though it is true that he occasionally used the Ptolemaic.[13] Yet this last he is careful to introduce with a "they say." Some of his figures reveal familiarity with the keenest battle of the war which the moderns carried on against the ancients, namely the onslaught of the chemical doctors, who upheld

[9] Ker, I, 36–37, 43–44. In order to show the possibility of progress in poetry, Dryden denies the theory of the decay of nature. *Ibid.*, II, 25.

[10] *Ibid.*, II, 33–34.

[11] *Ibid.*, I, 162–63.

[12] *Ibid.*, I, 63, 155, 252; II, 137.

[13] *Ibid.*, II, 103, 143, 158; and I, 70.

Baconian principles, upon the Galenists, who subscribed to the methods of the great physician of antiquity.[14] Sometimes one versed in seventeenth-century science detects echoes of it in unsuspected passages, as, for example, when Dryden, in expressing his distrust of the rules, says, "many a fair precept in poetry is, like a seeming demonstration in the mathematics, very specious in the diagram, but failing in the mechanic operation."[15] Can there not be heard in this passage the voice of a Baconian scientist, condemning the theoretical and speculative nature of Peripateticism, and its lack of useful or practical application? Dryden is also one with the scientists in respect to the theory of nature's decay, which in every field underlay the feeling of modern inferiority and increased the power of authority. He maintains that "the course of time rather improves nature than impairs her," and in this simple statement a great deal is contained.

In his sceptical attitude, at times in his method of reasoning, and in his revolt against the domination of the ancients in literature and against the principle of authority in general, Dryden owes a considerable debt to his fellow-members of the Royal Society, but in nothing more than in that vision of progress in poetry, which he caught from a similar vision in science, and which is a frequent *motif* in his criticism.

II

Towards the end of the seventeenth century the scientific movement becomes somewhat weaker,[16] in spite of or perhaps because of

[14] *Ibid.*, II, 158.

[15] *Ibid.*, I, 252.

[16] William Wotton expressed fear for the future of science because "the Humour of the Age, as to those things, is visibly altered from what it was Twenty or Thirty Years ago; So that though the ROYAL SOCIETY has weathered the rude Attacks of such sort of Adversaries as STUBBE, who endeavored to have it thought, That Studying of Natural Philosophy and Mathematicks, was a ready Method to introduce Scepticism at least, if not Atheism into the World: Yet the sly Insinuations of the *Men of Wit*, That no great things have ever, or are ever like to be performed by the *Men of Gresham*, and, That every Man whom they call a *Virtuoso* must needs be a *Sir Nicholas Gim-crack*, have so far taken off the Edge of those who have opulent Fortunes, and a Love to Learning, that Physiological Studies begin to be contracted amongst Physicians and Mechanicks." *Reflections upon Ancient and Modern Learning*, 1694, pp. 356–57. Much earlier, Sprat had expressed concern over the damage which the satirists might inflict upon science. *History of the Royal Society*, 1667, p. 417.

Newton's great discoveries, which seemed to have left nothing else to be explained. But in the last decade an event came to pass which again brought its values and attitudes clearly before the public. This was the appearance of Sir William Temple's essay *Of Ancient and Modern Learning,* 1690. Sir William was a retired statesman, who in his cautious political career made no misstep, but who was not so fortunate in his literary activities, for this essay, though it ultimately led to notable literary results in Swift's *Battle of the Books,* brought only chagrin to the author. The essay is a thinly veiled attack on the new science in general and the Royal Society in particular, in which the author makes a little learning go a long way, in a graceful and charming style. The members of the Society became concerned, and engaged a learned young man, William Wotton, to write a defense of the organization.[17] In it the claims

[17] See T. R., *An Essay upon Critical Learning,* 1698, p. 47; William Wotton, *Reflections upon Ancient and Modern Learning,* 3rd ed., 1705, pp. 393, 475; Richard F. Jones, *Background of the Battle of the Books* (Washington University Studies, Volume VII, Humanistic Series, St. Louis, 1920, pp. 150–155), and *Ancients and Moderns,* p. 278. For specific references to the Royal Society see Wotton's *Reflections,* 1694, pp. 233, 306–7, 347, 357; and for references to the controversy between the ancients and moderns, which centered around the Royal Society, see pages 3, 78–80, 156, 170, 293, 257. Wotton gives a brief outline of the development of the scientific movement in the seventeenth century: "Now as this [experimental and mechanical] Method of Philosophizing laid down above, is right, so it is easie to prove that it has been carefully followed by Modern Philosophers. My Lord *Bacon* was the first great Man who took much pains to convince the World that they had hitherto been in a wrong Path, and that Nature herself, rather than her Secretaries, was to be addressed by those who were desirous to know very much of her Mind. Monsieur *Des Cartes,* who came soon after, did not perfectly tread in his Steps, since he was for doing most of his Work in his Closet, concluding too soon, before he had made Experiments enough; but then to a vast Genius he joined exquisite Skill in Geometry, and working upon intelligible Principles in an intelligent Manner; though he very often failed of one Part of his End, namely, a right Explication of the Phænomena of Nature, yet by marrying Geometry and Physicks together, he put the World in Hopes of a Masculine Off-spring in process of Time, though the first Productions should prove abortive. This was the State of Natural Philosophy, when those great Men who after King *Charles* II's Restoration joined in a Body, called by that Prince himself, the ROYAL SOCIETY, went on with the Design; they made it their Business to set their Members awork to collect a perfect History of Nature, in order to establish thereupon a Body of Physicks; what has been done towards it by the Members of that illustrious Body will be evident by considering that *Boyle, Barrow, Newton, Huygens, Malpighius, Leeuwenhoek, Willoughby, Willis* and Abundance more already named amongst the great Advancers of real Learning have belonged to it." *Reflections* (1694), pp. 306–7.

of modern science against ancient are bravely asserted and the controlling ideas of the scientific movement are brought again to the front.

In the very year in which Wotton published his answer to Temple, 1694, Charles Gildon, a young and enthusiastic critic, produced a collection of short critical essays,[18] which, inspired partly by Dryden's criticism, approach critical problems almost entirely from the point of view of the new science. The first essay replies to Thomas Rymer, a critic who represents the extremes to which the dogmatic rules of neo-classicism and the worship of ancient models went in England.[19] Rymer had applied the rules to Shakespeare, and the result of his appraisal was that the bard of Avon knew no more about human nature than a pug in Barbary. Against this judgment Gildon rises up with considerable warmth. He asks if we are to admire Shakespeare, as Dryden does, or place him below the meanest poets, as Rymer has done—Rymer "whom," he says, "nothing it seems can please, but the Antic Forms and Methods of the *Athenian* Stage, or what comes up, and sticks close to them in our Language." He does not pause for a reply but proceeds immediately to the answer: "I Can see no Reason why we should be so very fond of imitating them here, without better proofs than the Critical Historiographer has produc'd." From this negative position he passes to more positive arguments against Rymer.

'Tis certain, the *Grecians* had not the advantage of us in *Physics*, or any other part of Philosophy, which with them chiefly consisted in words; they were a Talkative People; and being fond of the Opinion of Learning, more than the thing it self, as the most speedy way to gain that, stop'd their Enquiries on Terms, as is evident from their *Sophistry* and *Dialectics*.

This characterization of ancient philosophy, or science, could have been taken almost verbatim from Sprat's *History of the Royal Society*. "There can be," Gildon continues, "no dispute among the Learned, but that we excel them in these Points. Since the time of *Des Cartes*, when the Dictates of *Greece* began to be laid aside, what a Progress has been made in the discovery of Nature? and

[18] These are contained in *Miscellaneous Letters and Essays, on several Subjects. Philosophical, Moral, Historical, Critical, Amorous, etc. in Prose and Verse. Directed to John Dryden, Esq; The Honourable Geo. Granvill, Esq; Walter Moile, Esq; Mr. Dennis, Mr. Congreve, and other Eminent Men of the Age. By several Gentlemen and Ladies.* London, 1694. Gildon edited the volume and wrote most of it.

[19] "Some Reflections on Mr. Rymer's Short View of Tragedy, and an Attempt at a Vindication of Shakespeare, in an Essay directed to John Dryden Esq;."

what Absurdities laid open in the School Precepts and Terms of *Aristotle?*''[20] Gildon sees in the revolt of modern science against ancient, and in its demonstrated superiority, sufficient reason for questioning the validity of classical rules in literature, and for doubting the superiority of Greek over English drama. From the same source he also draws the hope that as knowledge progresses with the new science, so may literature, if the shackles of authority are removed.

There is one argument advanced by this critic which, I am sure, no student of literature would concede to any scientist; namely, that the investigation of natural causes and effects is more difficult than the writing of plays, which in his eyes required only '' a nice observation of Mankind.'' Nevertheless, he writes that he cannot understand how the Greeks should have so great an advantage over the moderns in drama, as some would allow them, when they are so far behind the moderns in matters of greater difficulty, *i.e.*, science. ''But,'' he says, ''it can't be otherways, whilst we make that Age and Nation the Standard of Excellence without regard to the difference of Custom, Age, Climate, etc.''[21]

In his next essay[22] Gildon is again answering Rymer, and also the French critic Rapin, who wished to prohibit the introduction of love scenes into tragedy because Greek drama does not contain them. He insists, and rightly, that the position of the two critics rests only on authority. ''The chief Arguments,'' he says

> which these Gentlemen bring, are from the Practice of the Ancients, . . . whose Authority they are of opinion shou'd outweigh Reason. But since the *Ipse dixit* has been so long laid aside in Philosophy, as an enemy to our Enquiries into Nature, I can see no reason why it shou'd be of so much greater force in Poetry; since 'tis perhaps almost as prejudicial to our imitation of Nature in *This*, as to our discovery of it in the Other.

From this analogy Gildon clearly perceived that freedom in art was as essential to the development of poetry as freedom in investiga-

[20] *Miscellaneous Letters and Essays*, pp. 86–7.

[21] *Loc. cit.* Wotton maintains that the superiority of the ancients in poetry and oratory does not argue the inferiority of the moderns in genius, since the latter have surpassed antiquity in science; and he asks, "Does it seem harder to speak and write like *Cicero* or *Virgil*, than to find out the motions of the Heavens, and to calculate the Distances of the Stars?" *Reflections on Ancient and Modern Learning*, 1694, p. 24.

[22] "An Essay at a Vindication of Love in Tragedies, against *Rapin* and Mr. *Rymer*. Directed to Mr. Dennis."

tion was essential to the progress of scientific knowledge. He is not arguing only from analogy; he believes that the imposition of authority on literature leads to the same kind of stagnation which it had created in science. He explains rather than modifies his view when he says:

> As far as the Ancients and the Rules *Aristotle* draws from them, agree with the Character you give these, Of being *nothing but good sense and Nature reduc'd to Method*, I shall close with them; but when they either deviate from this, or reach not up to what may be done, I must think it but just to withdraw myself from the subjection of the *Stagyrite*, who has had a Reign long enough o'er the Minds of Mankind, and an Empire that far exceeded the Extent and Continuance of his Royal Pupil *Alexander*.[23]

Our liberal critic is not contending for what might be called a romantic freedom, but for an enlightened and more liberal neoclassicism, one of the fundamental elements of which, the imitation of nature, he upholds. For this reason he attacks the narrow dogmatic rules, for the support of which ancient authority was invoked, and he insists that there are more ways of imitating nature than those specified by these rules. He also further defines his attitude towards antiquity by acknowledging, as the scientists had done in their field, that the Greeks were the inventors of tragedy and comedy, but, like the scientists, he refuses to let that fact bar the development of the drama, and stand as a *non plus ultra* to the progress of poetry.[24]

In his third essay[25] Gildon pursues an argument of a more novel, if not more significant, nature than any drawn from science. This time he diverts his attack from Rymer to an anonymous author who had maintained that the love poems of the ancients were superior to those of the moderns because, to quote the author's own words,

> The occasions upon which the poems are written, are such as happen to every Man almost that is in Love; and the Thoughts such, as are natural for every Man in love to think. The Moderns, on the other hand, have sought out occasions that none meet with but themselves, and fill their Verses with

[23] *Miscellaneous Letters and Essays*, p. 146.

[24] *Ibid.*, pp. 151–52.

[25] "An Essay at a Vindication of the Love-Verses of Cowley and Waller, etc. In Answer to the Preface of a Book Intituled, Letters and Verses Amorous and Gallant. Directed to Mr. Congreve." The author of the "Book" was William Walsh.

thoughts that are surprising and glittering but not . . . natural to a Man in Love.[26]

This fundamental classical principle of the universal Gildon counters with the idea of a relative aesthetic, an idea which later was incorporated in the conception of historical criticism. To understand his reasoning, however, it is necessary to revert to the clash between the experimental doctors and the Galenists. One of the arguments produced by the physicians of the new science against the authority of the ancients in medicine was that diseases vary according to countries, times, and nations; and, therefore, the remedies that might have been efficacious in antiquity were useless when applied to modern ailments.[27] Thus, they contended, it is necessary to discard the supposedly authoritative principles of ancient medicine, and discover new remedies by observation and experiment. This method of reasoning Gildon appropriated *in toto*, and he applied it to love poetry. Repeating the concession he had made once before, he says:

I shall never deny the Ancients their just Praise of the Invention of *Arts* and *Sciences*; but I cannot without contradicting my own Reason, allow them the Perfectors of 'em so far that they must be our uncontroverted Patterns and Standard: For our Physicians have found the Prescripts of *Hippocrates* very Defective: And as in Physic, so in Poetry, there must be a regard had to the Clime, Nature, and Customs of the People; for the Habits of the Mind as well as those of the Body, are influenc'd by them; and *Love* with the other Passions vary in their *Effects* as well as *Causes*, according to each Country and Age; nay, according to the very Constitution of each Person affected.

This fact, he concludes, renders fallacious any idea that the ancients should furnish immutable standards of literary excellence

[26] See the preface to *Letters and Poems, Amorous and Gallant*, 1692. In contrast to his staunch championship of the moderns in science, Wotton concedes the superiority of the ancients in poetry and oratory. He takes Perrault to task for holding that ancient love poems, compared with modern, are rude and unpolished, because they lack gallantry: "It may be justly questioned, whether what Monsieur *Perrault* calls *Politeness*, be not very often rather an Aberration from, and Straining of Nature, than an Improvement of the Manners of the Age: If so, it may reasonably be supposed, that those that medled not with the Niceties of Ceremony and Breeding, before unpractised, rather contemned them as improper or unnatural, than omitted them because of the Roughness of the Manners of the Ages in which they lived. *Ovid* and *Tibullus* knew what Love was, in its tenderest Motions; they describe its Anxieties and Disappointments in a Manner that raises too many Passions, even in unconcerned Hearts." *Reflections*, pp. 51–52.

[27] See Marchamont Nedham's *Medela Medicinae*, 1665, and Jones, *Ancients and Moderns*, p. 216.

for the moderns.[28] In his insistence upon the principle of relativity, and in his emphasis upon the individual as opposed to the universal, Gildon takes a step toward romanticism.

The idea of a relative aesthetic appears again in Gildon's last essay,[29] which upholds the superiority of modern poetry in general over ancient. In answer to the champions of antiquity who would deny the moderns the title of poets because they did not strictly observe Aristotelian rules, he asserts that the dogmatic critics have mistaken the true purpose of poetry, which is pleasure. To achieve this end, he says, "regard must be had to the *Humour, Custom,* and *Inclination* of the Auditory; but an *English* Audience will never be pleas'd with a dry, Jejune and formal Method that excludes Variety as the Religious observation of the Rules of *Aristotle* does."[30] In short, classical principles of art are not good for all time, and if pleasure, the true purpose of poetry, is to be achieved, a different art, determined by the age and nation which produce it, is required.

Gildon does not loom large in the history of criticism, but in his defense of Shakespeare, attack on authority, hostility to imitation, idea of a relative aesthetic, insistence on the aesthetic purpose of poetry, and belief in the possibility of the advancement of literature, what influence he exerted made for the liberalizing of the neo-classical spirit.

Throughout the criticism of this age one finds frequent allusions to the scientific movement and arguments drawn from it. In fact, the frequency with which they occur when any liberal sentiment is expressed, indicates the strength and widespread nature of the influence. One writer, who advocated the spending of more time on the study of English and less on that of the classical languages, remarks that since "our *Astronomers* and *Mathematicians, Physicians* and *Surgeons,* by Benefit of longer Time and experience, have gone beyond the Ancients in their Art and Knowledge; is

[28] *Miscellaneous Letters and Essays,* p. 210.

[29] "To my Honoured and Ingenious Friend Mr. Harrington, for the Modern Poets against the Ancients." Throughout most of the seventeenth century the controversy between the ancients and moderns in England was almost exclusively concerned with science. Even Wotton himself gave the palm to the ancients in the arts. But toward the end of this century and in the next, literature became the center of the quarrel. In a way my article merely indicates the influence which the first stage of the controversy exerted upon the second.

[30] *Miscellaneous Letters and Essays,* p. 223.

there any good Reason why we should be behind them in Wit and Language?"[31] The habit of introducing the scientific parallel became so common as to appear in comedy. In the passage referred to, one character remarks that he would as soon receive medical treatment by the rules of Hippocrates and Galen as see a play written by the rules of Aristotle and Horace.[32] To this view Farquhar, a practical and successful dramatist, would certainly have subscribed, for in his essay on comedy he inveighs against Aristotle's authority and tries to undermine his reputation as a critic. "I will have a tug with *ipse dixit,* tho' I dye for 't," he declares. After stoutly denying "that we live in the decay of Time, and the Dotage of the World is fall'n to our Share," he exclaims,

> No, no, Sir, *ipse dixit* is remov'd long ago, and all the Rubbish of old Philosophy, that in a manner bury'd the Judgment of Mankind for many Centuries, is now carry'd off; the vast Tomes of *Aristotle* and his Commentators are all taken to pieces, and their Infallibility is lost with all Persons of a free and unprejudic'd Reason.

This being so, he asks, "by what Authority shou'd Aristotle's Rules of Poetry stand so fixt and immutable?"[33]

III

In 1716 Sir Richard Blackmore, a physician and a poet of small ability, published an *Essay upon Epic Poetry,*[34] the primary purpose of which was to overthrow some of the most cherished neoclassical principles of the epic. A scientist himself and a fellow of the College of Physicians, he undoubtedly was familiar with that stream of scientific thought that had come down from the middle of the seventeenth century. At an earlier date he had expressed contempt for servile imitators of the ancients, and had voiced the hope that some good genius "would break the *Ice,* assert the *Liberty of Poetry,* and set up for an *Original* in Writing in a way accommodated to the Religion, Manners, and other Circumstances we are now under."[35] When after sixteen years no such hero arose, he

[31] *Many Advantages of a Good Language,* 1724, p. 25.

[32] The play is Thomas Killigrew's *Chit-Chat,* 1719, Act IV, Sc. 2. See *Critical Remarks on the Four Taking Plays of this Season . . . By Corinna, a Country Parson's Wife,* 1719, p. 52.

[33] See "A discourse upon Comedy, in Reference to the English Stage," 1702, in *Critical Essays of the Eighteenth Century, 1700–1725,* ed. W. H. Durham, pp. 263–64.

[34] This essay is found in *Essays upon Several Subjects,* 1716.

[35] See the preface to *A Paraphrase upon the book of Job,* 1700.

engaged in this more elaborate attack on antiquity. He has not proceeded far in his essay before he launches upon a short history of the scientific revolt, which needs to be quoted in full if his position is to be clearly understood. After speaking of the blind obedience to Aristotle on the part of his earlier followers, he says:

> The voluminous Lucubrations of these idle Students, who only copy'd and expounded their Leader's Sentiments, which they follow'd with a blind Obedience, were esteem'd the only valuable Productions of Philosophy. At length arose some famous Worthies, who animated by a generous Impulse to deliver *Europe* from the basest Servitude, that of the Understanding, attack'd *Aristotle* and his Adherents with great Vigour, declar'd against all arbitrary Impositions on the Mind, and asserted the Liberty of Reflection and a Power of examining Evidence, and judging for themselves. These excellent Persons, who deserv'd so well of Mankind, by vindicating the Dignity of Humane Nature, and standing up for its Rights and Prerogatives, against the Usurpation of a particular Sect, having by an impartial Search discover'd that the Peripatetick System had nothing in it for its support, but precarious and unevident Principles, effectually expos'd its Weakness, and soon brought the greatest Authority, that was ever establish'd in the Schools, into general Contempt.

The purpose of this lengthy preamble is clearly visible in the next passage, in which he expresses surprise that the revolution in science was not extended to cover literature as well. "But when," he continues,

> these extraordinary Men, by encouraging the free Exercise of Reason, had infus'd an active Ferment into the Minds of an ignorant and slothful Generation, by the Operation of which they were excited to throw off the yoke of *Aristotle* in Matters of Philosophy, it is wonderful that the Effect was not more extensive. They had as great Reason to have proceeded to the Examination of his Rules in the Art of Poetry, and to have made Enquiry if those were settled on better Foundations.

Blackmore believes that the collapse of Aristotle's authority in science should have inspired scepticism regarding its validity in poetry. The realization that such had not been the case moved him to denounce the dogmatic critics of his day, and to associate them with the incorrigible and subservient Aristotelians of the preceding age. "But," he says,

> I know not how it came to pass, his [*i.e.*, Aristotle's] Notions and Precepts in this Art have still remain'd unquestion'd and untry'd. The modern Criticks, contemning the Examples of the Philosophers, have still proceeded

in the old beaten Track, of believing and admiring whatever *Aristotle* advances on the Subjects, where the Muses are concern'd. They are all like their submissive Predecessors, mere Expositors, scarce excepting *Bossu* himself, of the writings of that great Man, and have made no Improvements, nor asserted the Liberty of Poetry, as the other freer Spirits have vindicated that of Philosophy. It's clear, that *Aristotle* form'd all his Axioms and Doctrines in Poetry, from the Patterns of *Homer* and other *Greek* Writers; and without assigning any Reason of his Positions, relies for the Truth of them on his own, or the Authority of those Authors. But it is not the Authority of the greatest Masters, but solid and convincing Evidence, that must engage our Belief, and make us subscribe to any Maxims in any Art or Science whatsoever.[36]

In view of the intensity of the earlier scientific rebellion against antiquity, and of the number of important men who were engaged in it, Blackmore's surprise that the revolt was not extended is not strange. But what he does not seem to realize is that as the seventeenth century advanced, the spirit of literature, and, to a limited extent, the universities, remained humanistic, while science pursued a largely independent course. It became, in fact, the target for the ridicule of the greatest writers of the time, such as Swift and, later, Pope. Sir Richard, however, was only partially correct, as the examples of Dryden and Gildon show, and his own essay reveals one more critic inspired by the independence of science and rebelling against the domination of the classics. That his inspiration came from science is further revealed in his attitude toward Aristotle, which in one passage is expressed in words so reminiscent of the earlier upholders of the experimental philosophy as to seem almost like direct quotation:

I look upon *Aristotle* as a great Genius, and a Person of more than common Erudition; but will no more submit to him as a Law-giver of the Poets, than of the Philosophers. I shall always pay Respect and Deference to his Judgment and Opinions, tho not acquiesce in them as infallible and decisive Decrees.

It is not that he loves Aristotle less, but liberty more. He would not in general, he says, condemn Aristotle's rules, but "I shall use the same Liberty in adding any new Opinions on this Subject, which in my Judgment will improve the Art of Poetry."[37] He even looks with some tolerance upon one of the chief ideas of the supporters

[36] *Essays upon Several Subjects,* pp. 10 ff.

[37] *Ibid.,* pp. 14–15.

of the ancients, namely, that the works of antiquity have demonstrated their excellence in being approved by so many nations for so many ages. Yet he strenuously denies that this fact is proof of their infallibility. "Universality and Antiquity," he says, "are to be look'd on with Respect and Reverence; but since they have been often produc'd to support manifest Errors in Philosophy as well as in Religion, and have therefore been often rejected, why should they be regarded as infallible in Poetry?"[38] Blackmore recognized in this idea of universal and repeated consent one of the strongest supports of authority. He introduces it more frequently and answers it more elaborately than any other opinion. Fortunately, if science had demonstrated anything, it had shown that the life of error may indeed be long, that many ideas had down through the ages met with wide approval, only to be overthrown at last by some experimental scientist. Thus the new science offered him the soundest possible reasons for refuting the idea, and he makes full use of them. "*Aristotle's* Notions in Philosophy," he says,

> were, for many Ages, as universally receiv'd by the learned World as *Homer's* Poetry, and esteem'd as the Dictates of the most profound Judgment and Oracles of Reason; yet, after he had reign'd in the Schools many Centuries with uncontested Authority, upon Examination he was discover'd to have no just Claim to this great Dignity; he was found out to be an Usurper, strip'd of his Titles and Regalia, and not only degraded, but treated with the greatest Contempt. . . . It is vain to urge the Suffrages of Antiquity, against clear and solid Argument. In this Case Citations are neither pertinent nor useful, for the Authors of former Ages are disqualify'd from giving their Votes in a Matter of this Nature; no length of Time, no not three Thousand Years, is a sufficient Prescription to bar the Claim of Reason, which has an undoubted Prerogative to seize upon its Rights, when, and wherever they are discover'd.[39]

The chief consideration which intensifies Sir Richard's hostility to authority is the loss of liberty which the latter entails, and with this loss of liberty the impossibility of any development in poetry. Looking upon the great advance which had been made in science since the overthrow of ancient dictates, he ardently desires the same progress for poetry. "If Men," he says,

[38] *Ibid.*, p. 160.

[39] *Ibid.*, pp. 166–67.

from a generous Principle of Liberty, would renounce the unjust, tho prevailing Power of Authority, and claim their natural Right of entring into the Reason of Things, and judging for themselves, it is highly probable that the Art of Poetry might be carry'd on to greater Degrees of Perfection, and be improv'd, as Philosophy has been.

He discovers another happy result of this freedom in the discrediting of the pettifogging critics who would place literature in the strait-jacket of neo-classical rules and judge its excellence solely by classical examples. He promises that

When thus unfetter'd and disingag'd from a slavish Dependence upon celebrated Writers, Men would soon disregard the crude and unreasonable Assertions frequently laid down by injudicious Commentators and superficial Grammarians, whose Attainments consist in a Collection of Examples, and an Ability to explain the *Roman* and *Grecian* Authors: Nor will a modern Heroick Work be any longer acquitted or condemn'd merely as it bears a Conformity or Dissimilitude to the *Iliad* or the *Aeneid.*"[40]

Instead, Blackmore thinks, critics will find it necessary to advance substantial grounds for their critical appraisals, and a more fruitful investigation of the nature of art will follow.

Sir Richard takes the occasion to answer what is almost the only possible objection to the evidence which he derives from the history of science. "Neither is it sufficient to alledge," he says,

that *Aristotle* has express'd greater Judgment and Accuracy in his Discourses on Poetry, than in his Philosophical Productions; and therefore, tho the last, upon a just Tryal, have been exploded, yet the first have been esteem'd in all Ages by the Learned World as masterly Instructions, and continue undisputed to this Day; for this is still to press us only with the Authority of *Aristotle* and his Commentators. If his Rules and Precepts of Poetry ought to be so highly regarded, it must be upon this Account, That stronger Reasons can be produc'd in Defense of these, than of his System of Natural Science: But how can this appear, if we take his Writings on the Art of Poetry upon Content, and do not by an impartial Examination make it clear, that the Evidence of Reason is on their Side; which was wanting to support his Philosophy? And this, as far as I know, has not been attempted.[41]

The argument opposed here by Blackmore was potentially the most powerful one advanced against the deadly scientific parallel, and

[40] *Ibid.*, pp. 12–13.

[41] *Ibid.*, pp. 13–14.

had been employed in France by such defenders of the ancients as Dacier. Many years earlier Gildon had acknowledged that the poets of Greece still maintained their glory though Greek science had been overthrown, but he had pursued the theme no further, for he was then writing against the ancients.[42]

In the long interval, however, that elapsed between his early and later criticism, he underwent a transformation in his critical views, and became one of the narrowest and most dogmatic of neo-classical critics, a complete critical apostate. In a work published five years after Blackmore's essay, he attacks the critical doctor severely for maintaining the same opinions which he himself in the preceding century had espoused with such enthusiasm. He seizes especially upon the argument which Blackmore had tried to answer, and which asserts that some distinction must be drawn between what might be called the naturalistic and the humanistic works of Aristotle. But Gildon muffs his opportunity, for he contents himself with the argument that Aristotle's philosophy had not received the approbation of all ages, that it was introduced by the Schoolmen to support Catholic theology, and that in this limited field only was it given an authoritative character. Since, he says, its authority did not arise

> from the universal consent of all men, and in all ages and nations where his philosophy had appear'd, . . . the instance which *Sir Richard* gives is very defective, not to say unfair, when he puts that, which was forc'd upon mankind, on the same bottom with what was voluntarily receiv'd, from the evidence of the truth and reason that was found in those works of *Aristotle*,

[42] "I will yield that *Greece* had Great Poets, notwithstanding all those monstrous Faults and Absurdities they abound with; tho he [Rymer] will not allow the *English* any Honour, because they have been guilty of Errors. Nay, I'll say more, that the Poetry of *Greece* was her most valuable Learning, for that still maintains its share of Glory and Esteem, whilst her Philosophy is now exploded by the Universal Reason of Mankind. *Homer, Pindar, Sophocles,* and *Euripides* will, as long as they are understood, preserve their Characters of Excellent Poets, tho the *Stagyrite* with all his Volumes is now shrunk from the ostentatious Title of the *Philosopher* to that of a good *Critic,* or *Grammarian.*" (*Miscellaneous Letters and Essays,* p. 221.) Other critics than Gildon found it necessary to recognize the overthrow of Aristotle's authority in science. Rymer says, "And however cryed down in the Schools, and vilified by some modern Philosophers; since Men have had a taste for *good sense,* and could discern the beauties of correct writing, he [Aristotle] is prefer'd in the *politest* Courts of *Europe,* and by the *Poets* held in great veneration."—"Preface to Rapin," *Critical Essays of the Seventeenth Century,* ed. J. E. Spingarn, II, 164.

that have met with that universal approbation which his *poetics*, his *rhetorics*, his *politics*, and his *ethics* have found.[43]

Because Gildon noticed only the history of Aristotle's scientific and humanistic works, and did not enquire into the difference between their natures, he failed to grasp a distinction that might have furnished him much more cogent proofs than the pitiful evidence he advances.

The development of the thought-movement which we have been following did not proceed independently of France, where the controversy between the ancients and moderns was still active, and was at this time especially concerned with Homer. In fact, Blackmore's essay was partly inspired by this controversy, and reveals distinct indebtedness to a treatise by one of the supporters of the moderns, the Abbé Terrasson, which, in the year Sir Richard's essay appeared, was translated into English by Francis Brerewood under the title *A Discourse of Ancient and Modern Learning*. It is not my purpose to enter into the complexities of Anglo-French relations in this matter, except to indicate one difference between the movements in the two countries. Terrasson attacks the authority of the ancients as a bar to the progress of poetry and a dishonor to the mind of man, and he introduces the popular parallel from science, but he does all this merely to install Le Bossu in Aristotle's chair of authority—a wretched substitution—and to move French neo-classical poets into the place vacated by Homer and other ancient worthies. The French critic shows how the development of Cartesian science and French classicism went hand in hand, and he argues the superiority of modern writers over ancient, because the former observed more consistently the unities, decorum, and other neo-classical principles, originally based upon the ancients.[44] In short, the freedom from classical authority which the French moderns demanded furnished merely the opportunity to place stronger chains upon themselves.[45] The freedom

[43] *The Laws of Poetry*, 1721, pp. 263–64. Wotton points out that though science is unlimited and therefore capable of progressing, poetry is a limited art and not necessarily capable of advancing. *Reflections*, pp. 46–47. He seems to have recognized the fact that art does not necessarily obey the same law of progress which science follows.

[44] See pp. x, xv, lviii–lxi, lxxiii, lxxxvii, lxxxix, xci, xcii–xciv.

[45] *Cf.* Ker, vol. I, p. xxiii. Wotton says, "In Poetry likewise he [Perrault] sets Monsieur *Boileau* against *Horace*, Monsieur *Corneille* and Monsieur *Moliere* against the Ancient *Dramatick* Poets. In short, though he owns that some amongst the

desired in England was more of a true liberty, and since the moderns whose cause the critics were defending were in large part Elizabethans, especially Shakespeare, the upholders of modernity were essentially contending for a more liberal art. So the controversy in France, deeply influenced by Descartes, made for neo-classicism, while the same controversy in England, reflecting Bacon, moved toward romanticism.

Blackmore, however, did not move far in that direction. But he did insist upon the necessity of a sceptical attitude, upon the liberty of examining and scrutinizing received opinions, and upon the privilege of making additions to critical principles. He does not hesitate to disagree firmly with Le Bossu, to whom Terrasson would hand Aristotle's sceptre. Inspired by the precedent of science, he expresses vigorous dissent from various neo-classical rules, maintaining, for instance, that the epic hero need not be virtuous; that the action need not be prosperous; that the sufferings and calamities of a hero are as fitting material for an epic as his actions and exploits; and that the poem need not embody a moral.[46] Unfortunately, the liberty of departing from received opinions played him false, if his own epics be taken as proof, for they well deserve Pope's satire in the second book of the *Dunciad,* where they are represented as quite capable of putting the most hardened critic to sleep.

IV

Nowhere is the difference between the French and English revolts from the ancients more clearly revealed and the note of liberty more loudly struck than in the next and last critic to be considered. In 1759, a year so far removed from seventeenth-century science that one might well suppose its influence was already spent, Edward Young published an essay entitled *Conjectures on Original Composition,* which upholds original as opposed to imitative writing, and which is one of several critical works that definitely mark the turning of the literary tide from neo-classicism to romanticism.

Ancients had very exalted Genius's, so that it may, perhaps, be very hard to find any Thing that comes near the Force of some of the Ancient Pieces, in either Kind, amongst our Modern Writers, yet he affirms, that Poetry and Oratory are now at a greater heighth than ever they were, because there have been many Rules found out since Virgil's and Horace's Time; and the old Rules likewise have been more carefully scanned than ever they were before." *Reflections,* pp. 46–47.

[46] *Essays upon Several Subjects,* pp. 49, 52, 77, 78–79.

Though its own originality can easily be exaggerated, it contains complete, distinct, and confident statements of ideas and attitudes which before had, for the most part, received only brief, sporadic, or subdued expression: hostility to the authority of the ancients; insistence upon freedom from restraining rules; liberty to widen the domain of poetry; depreciation of reason and learning; emphasis upon inspired genius and creative imagination; the organic as opposed to the mechanical theory of art; and belief in the magical and transporting power of verse. All these show how far the treatise is removed from the critical dogmas of the preceding hundred years. Admittedly inspired by Bacon, it is saturated with his spirit and strewn with his ideas, as well as touched by his eloquence. Young speaks of Bacon as one "under the shadow of whose great name I would shelter my present attempt in favour of originals." And, indeed, the general position and attitude of the two men are remarkably similar. Just as Bacon, perceiving the stagnation of learning and the inadequacies of knowledge to be due to servile submission to antiquity, in ringing tones called upon his fellow men to arouse themselves, throw off their fetters, and begin independent investigation of nature; so Young, with the same reforming zeal, urges men to arise, strike off the chains of classical authority, and allow their own genius full play, for "The wide field of Nature . . . lies open before it, where it may range unconfined, make what discoveries it can, and sport with its infinite objects uncontrolled, as far as visible nature extends." I cannot refrain from comparing with this passage the promise which the Baconian spirit in Thomas Sprat made to the experimental scientists of his day: "The Beautiful Bosom of *Nature* will be Expos'd to our view: we shall enter into its *Garden,* and tast of its *Fruits,* and satisfy ourselves with its plenty."[47]

In analyzing the obstacles standing in the way of the development of poetry, a development which the independent activity of poetic genius could make possible, Young draws heavily upon the reasons Bacon gave for the stagnation of science. In fact, he quotes the Lord Chancellor as follows: "Men seek not to know their own stock and abilities; but fancy their possessions to be greater, and their abilities less, than they really are."[48] "Which," Young

[47] *History of the Royal Society,* 1667, p. 327.

[48] The quotation is the opening sentence of the Preface to the *Great Instauration.* Bacon continues: "Hence it follows that either from an extravagant estimate of the

adds, "is, in effect, saying, That we ought to exert more than de do; and that, on exertion, our probability of success is greater than we conceive."[49] In another passage Young repeats the idea that men do not know their own abilities. Thus he applies to his own purposes what had been advanced for the reformation of science. Bacon's idea that the advancement of learning is checked by the diffidence and despair which men derive from the belief that it is impossible to go beyond the ancients, finds emphatic expression in the later critic.[50] "Illustrious examples," he says, "engross, prejudice, and intimidate." And he gives this command to modern poets: "Let not great examples, or authorities browbeat thy reason into too great a diffidence of thyself."[51] Like his great predecessor, Young was concerned with inspiring in men confidence in their powers and also a hope of success independent of the an-

value of the arts which they possess, they seek no further, or else from too mean an estimate of their own powers, they spend their strength in small matters and never put it fairly to the trial in those which go to the main. These are as the pillars of fate set in the path of knowledge, for men have neither desire nor hope to encourage them to penetrate further." The idea that men do not put their abilities to the test is also clearly expressed by Young: "Its [the mind's] bounds are as unknown as those of creation; since the birth of which, perhaps, not one has so far exerted, as not to leave his possibilities beyond his attainments, his powers beyond his exploits. Forming our judgments altogether by what *has* been done, without knowing, or at all inquiring what possibly might have been done, we naturally fall into too mean an opinion of the human mind," and think that it is impossible to surpass Homer.

[49] Bacon says that more might be expected from the modern age than from antiquity, "if it but knew its own strength and chose to essay and exert it." *The Works of Francis Bacon*, ed. Spedding, Ellis, and Heath, New Edition, 1889, IV, 82.

[50] According to Bacon, the principal impediment to knowledge "hath been in despair or diffidence, and the strong apprehension of the difficulty, obscurity, and the infiniteness which belongeth to the invention of knowledge, and that men have not known their own strength." This fact, he says, has caused some to depend on authorities. Elsewhere he asserts that accepted authorities instil in men the belief that they can do nothing either by art or industry, a belief which "tend[s] wholly to the unfair circumscription of human power, and to a deliberate and factitious despair; which not only disturbs the auguries of hope, but also cuts the sinews and spur of industry, and throws away the chances of experience itself." *Op. cit.*, III, 249; IV, 86.

[51] Young makes use of the giant-and-dwarf figure, which appears repeatedly in the seventeenth-century controversy between the ancients and moderns: "Too formidable an idea of their [the ancients'] superiority, like a spectre, would fright us out of a proper use of our wits; and dwarf our understanding, by making a giant of theirs. Too great awe for them lays genius under restraint, and denies it that free scope, that full elbow-room, which is requisite for striking its most masterly strokes."

cients. For this purpose Lord Verulam had found it necessary to combat the theory of nature's decay, and later scientists continued to attack it. Young attaches the same importance to a refutation of the idea. Again and again he insists that modern powers lie under no necessary inferiority, that time cannot be held responsible for the lack of modern achievements, and that the mind's teeming time is not past.[52] He utilizes to good effect Bacon's paradox, *Antiquitas sæculi juventus mundi;* that, as regards the world, the moderns are the ancients.[53] From this he draws the same conclusion as the philosopher, namely, that the moderns must be richer in judgment and knowledge.[54] By nature, our critic says, we are as strong as the ancients, by time we stand on higher ground.

Another essential idea of Bacon's and one emphasized by later scientists, seized upon Young's mind—the idea of the liberty to investigate and to reason upon the results. As we have seen, this attitude inspired all the critics we have discussed with a similar desire for liberty to depart from established rules and models, and to introduce innovations into art. Like them Young argues for this freedom, which he considers essential to original writing. "Originals," he says, "soar in the regions of liberty; imitations move in fetters." Even more prominent in his essay is the idea of progress, which had inspired and encouraged seventeenth-cen-

[52] Other references to the theory are found in Young's assertion that an impartial Providence scatters talents indifferently through all periods of time, and that different portions of understanding are not allotted to different periods. For this reason he holds that nature cannot be blamed for modern inferiority.

[53] "And to speak truly *Antiquitas sæculi juventus mundi.* These times are the ancient time, when the world is ancient and not those which we account ancient *ordine retrogrado,* by a computation backward from ourselves." (Bacon, *op. cit.,* III, 291.) Young says: "though we are the moderns, the world is an ancient; more ancient far, than when they whom we most admire filled it with their fame."

[54] "For the old age of the world is to be accounted the true antiquity; and this is the attribute of our own times, not of that earlier age of the world in which the ancients lived; and which, though in respect of us it was the elder, yet in respect of the world it was the younger. And truly as we look for greater knowledge of human things and a riper judgment in the old man than in the young, because of his experience and of the number and variety of the things which he has seen and heard and thought of; so in like manner from our age, if it but knew its own strength and chose to essay and exert it, much more might fairly be expected than from the ancient times. . . ." (Bacon, *op. cit.,* IV, 82.) The last part of this quotation contains the gist of Young's essay, which calls upon men to know their own powers and exert them fearlessly and independently.

tury scientists, and which had hardened their faces against antiquity because its authority was an obstacle to advancement. Young contrasts the discoveries which originals may make with the sterility of imitations and their inability to go beyond the beaten paths of classical art.[55] Originals, he asserts, extend the republic of letters, and add a new province to its domain. They enable a poet not only to explore more fully the regions of nature, but also to survey the purely imaginary world. "In the fairyland of fancy," he says, "genius may wander wild; there it has creative power, and may reign arbitrarily over its own empire of chimeras."[56] The relatively timid pleas for liberty to go beyond the ancients in imitation of nature has grown into the bold demand for liberty to go even beyond nature. In pleading for literary progress, Young introduces, as earlier critics had done, the encouraging example of progress in scientific knowledge. After painting a bright picture of the future development of art, he concludes: "What a rant, say you, is here?—I partly grant it. Yet, consider,

[55] "Imitators," Young says, "only give us a sort of duplicates of what we have had, possibly much better before; increasing the mere drugs of books, while all that makes them valuable, knowledge and genius, are at a stand." And elsewhere he enlarges upon the fewness of originals: "So few are our originals, that, if all other books were to be burnt, the lettered world would resemble some metropolis in flames, where a few incombustible buildings . . . lift their heads, in melancholy grandeur amid the mighty ruin." *Cf.* Bacon, *op. cit.*, IV, 13–14: "For let a man look carefully into that variety of books with which the arts and sciences abound, he will find everywhere endless repetitions of the same thing, varying in the method of treatment, but not in substance, insomuch that the whole stock, numerous as it appears, at first view, proves to be but scanty. . . . Observe also that if sciences of this kind had any life in them, that could never have come to pass which has been the case now for many ages—that they stand almost at a stay, without receiving any augmentations worthy of the human race; . . ."

[56] After quoting Bacon's opinion that the moderns, under-estimate their own abilities, Young says, "Nor have I Bacon's opinions only, but his assistance too, on my side. His mighty mind travelled round the intellectual world; and with a more than eagle's eye, saw, and has pointed out, blank spaces, or dark spots in it, on which the human mind never shone: some of these have been enlightened since; some are benighted still." Bacon's assistance must have taken the form of inspiring Young to find the blank spots in the poetic world, and to show how a new province might be added to the literary domain, "the fairyland of fancy," for he says in the next sentence, "Moreover, so boundless are the bold excursions of the human mind, that in the vast void beyond real existence, it can call forth shadowy beings and unknown worlds, as numerous, as bright, and perhaps as lasting, as the stars; such quite original beauties we may call paradisaical."

my friend! knowledge physical, mathematical, moral, and divine increases; all arts and sciences are making considerable advance, and why may not poetry go forward with this advancement."[57] As examples of originals he mentions Milton and Shakespeare, but not these only, for he says, "in natural and mathematical knowledge, we have great originals already—Bacon, Boyle, Newton." Thus he draws closer together experimental science and creative poetry, and shows that the essential meaning he gives to the term "original" applies equally well to both.

The reference to Shakespeare merits comment. There is much praise of the poet in the essay, so much that the reader feels that he had a great deal to do with Young's idea of originality, but Shakespeare is not introduced for his dramatic excellence only; he is primarily considered as a means toward an end. Just as in the scientific movement great discoveries were employed, not for their intrinsic value, but because their excellence furnished proof for the validity of the principles of experimental science, which were themselves the matter of most concern; so Shakespeare is introduced to furnish proof of the principles of original composition. This is only an analogy, but it contributes something to an understanding of the similarity between the natures of the scientific and literary programs and between the means used to establish them.

There are other echoes of Bacon and of the scientific movement in Young, such as the belief that imitation of or reliance on antiquity prevents that progress in the liberal arts which the mechanical enjoy, because the latter try to go beyond their predecessors, while the former slavishly follow them.[58] And there are some

[57] Young finds definite evidence of the superiority of modern over ancient genius in the fact that the world has progressed in virtue, and since virtue assists genius, the latter must be greater than in former times. Thus, for his belief in the possibility of literary progress he draws support from the idea of progress in the religious and moral world, as well as from the advancement of science; but since his general indebtedness to Bacon and the scientific movement is so much more extensive and pronounced than to any other source, we are safe in inferring that the influence of the latter in this matter was correspondingly greater. Before Young's treatise appeared there had been considerable discussion concerning progress in religion and morality, upon which science exerted no negligible influence. See R. S. Crane, *Modern Philology, XXXI* (1933–1934), 273–306, 349–382; especially pp. 373–74.

[58] In speaking of the evil effects of imitation, Young says, "First it deprives the liberal and polite arts of an advantage, which the mechanic enjoy; in these men are ever endeavoring to go beyond their predecessors; in the former, to follow them. And since copies surpass not their originals, as streams rise not higher than their

figures of speech borrowed from Bacon, *e.g.*, "a stream cannot rise higher than its source."[59] That Young was well aware of the scientific movement in the seventeenth century is revealed in a specific reference to "the dispute over ancient and modern learning," a dispute which extended with varying intensity from the founding of the Royal Society in 1662 down to Temple and Wotton. The elaboration of other details is hardly necessary; a thorough treatment of the subject would require an article in itself.[60] Further-

spring, rarely so high; hence while arts mechanic are in perpetual progress and increase, the liberal are in retrogradation and decay." Bacon was very fond of the contrast: "In arts mechanical the first device comes shortest and time addeth and perfecteth. But in sciences of conceipt the first author goeth furthest and time leeseth and corrupteth" (*op. cit.*, III, 226.); and in speaking of the way in which authority prevents progress, he says, "hence it hath come in arts mechanical the first deviser comes shortest, and time addeth and perfecteth: but in science the first author goeth furthest, and time leeseth and corrupteth." (*Ibid.*, III, 289.) Elsewhere he dwells longer upon the comparison: "all the traditions and successions of schools is still a succession of masters and scholars, not of inventors and those who bring to further perfection the things invented. In the mechanical arts we do not find it so; they, on the contrary, as having in them some breath of life, are continually growing and becoming more perfect. . . . Philosophy and the intellectual sciences, on the contrary, stand like statues, worshipped and celebrated, but not moved or advanced. Nay, they sometimes flourish most in the hands of the first author and afterwards degenerate." *Ibid.*, IV, 14; *cf.* IV, 74–75.

[59] Young uses the figure to show that imitations prevent the progress of poetry because they cannot surpass their models, and Bacon employs it to illustrate his conviction that reliance upon Aristotle prevents the progress of knowledge, which is "like a water which will never arise again higher than the level from which it fell." *Op. cit.*, III, 227. *Cf. ibid.*, III, 290; IV, 16.

[60] A few other similarities may be mentioned. Young enlarges upon the fame accorded originals: "Fame, fond of new glories, sounds her trumpet in triumph at its [an original's] birth"; Bacon says, "the introduction of famous discoveries appears to hold by far the first place among human actions; and this was the judgment of the former ages." (*Op. cit.*, IV, 113.) Young comments upon the assistance which the ancients can lend the modern in enabling them to surpass the productions of antiquity: "Have we not their [the ancients'] beauties as stars to guide; their defects as rocks to be shunned?" Among the reasons given for the hope that his age may surpass the ancients, Bacon lists "the noble monuments of ancient writers, which shine like so many lights before us." (*Op. cit.*, V, 110.) In explaining the obstacles to progress, both Young and Bacon use the figure of master and pupil, the former stating that advancement would be possible "if ancients and moderns were no longer considered as masters and pupils," and the latter asserting that the traditional philosophy possessed no life, for "all the traditions and succession of schools is still a succession of masters and scholars." (*Op. cit.*, IV, 14.) Bacon says (*op. cit.*, III, 291) that one error induced by the worship of antiquity "is a distrust that anything should

more, what is more important than any details of similarity is the spirit and purpose of Young's proposed reformation. He is really trying to do for poetry what Bacon did for science, free it from the domination of the ancients, and put it on the right road to improvement. He could very well have called his essay *The Advancement of Poetry.*

V

The ways in which the scientific movement extended its liberalizing aid to literary criticism were various. It did much to develop a sceptical and critical attitude of mind, and, in the case of Dryden, may very well have fostered his inductive method of reasoning. But the most important assistance it offered was directed toward the overthrow of classical authority. Since the end of the Middle Ages the attack on authority had proceeded with little interruption. Authority in religion had been rejected in the Reformation; authority in government had been contested in the Commonwealth; authority in learning or science had been overthrown in the Restoration, and now authority was being expelled from its last stronghold—literature. Since the situation in criticism was exactly analogous to the earlier situation in science, it is not strange that the revolt of the latter should have inspired a similar revolt in the literary world. In this rebellion science assisted in two ways. First, it set an example of, and furnished a precedent for, the abandonment of submission to the dictates of antiquity. The mere fact that in one field of intellectual activity an increasing number of illustrious men had turned their backs upon the ancients could not but make its influence felt in other fields. Second, it had demonstrated the fallibility of those who had been considered infallible authorities. Again and again it had revealed the erroneous nature of traditional theories and ideas in every branch of science, and had thrown light on places which the ignorance of past ages left dark. Science had refuted in no uncertain manner that basic argument of conservatism, the consent of many men and many ages, by proving that

now be found out, which the world should have missed and passed over so long"; and Young declares that the reason why originals are so few is not that "the writer's harvest is over, the great reapers of antiquity having left nothing to be gleaned after them." Young merely points Bacon's ideas and expressions in a new direction. Brandl has noted Young's indebtedness, in thought and style, to the *Novum Organum,* I, 129. See *Jahrbuch der deutschen Shakespeare-Gesellschaft,* XXXIX (1903), 10–11.

many beliefs which had received such consent were totally false. Certainly the literary critic, looking at the shattered ruins of an erstwhile potent authority, could hardly fail to harbor misgivings regarding its validity in poetry.

Another way in which scientific attitudes induced like views in literature is revealed in the idea of progress or advancement. The title itself of Bacon's *Advancement of Learning* discloses the spirit which both inspired and motivated scientific activities in the seventeenth century. This desire for advancement science communicated to poetry. But it did more than that. By its discoveries it justified its own attitudes and partly realized its own hopes, and in doing so presented a stimulating example to literature. Critics came to see in the worship of classical authority the same obstacle to the progress of poetry which had barred the advancement of learning, and in the progress which science had achieved by overthrowing this authority, they discovered a hope that by pursuing the same course poetry could go forward, its domain could be widened, and its liberty enlarged.

And finally, in combatting the enervating idea of nature's decay, science was fighting not only its own battle but that of every aspect of modernity. This obstinate theory was slow to die. Arising in the sixteenth century and assuming the form of moral degeneration, it convinced the Elizabethans that theirs was an iron age, in which vice and wretchedness were the lot of man; in the seventeenth century it wore the guise of intellectual decay, and assured the moderns that their inferiority could never hope to go beyond the ancients in the discovery of scientific truth; and in the seventeenth and eighteenth centuries it whispered in the ear of the trembling poet that his enfeebled genius left him no other recourse than to follow meekly in the beaten paths of classical art, first laid out in the prime and vigor of nature.[61] Opposition to the theory was by

[61] *Cf.* Pope's *Essay on Criticism*, I, 189, 196–8:

> Hail, Bards triumphant! born in happier days,
>
> . . . . . .
>
> The last, the meanest of your sons inspire,
> (That on weak wings, from far, pursues your flights,
> Glows while he reads, but trembles as he writes)
>
> . . . . . .

On the history of the theory of decline, see J. B. Bury, *The Idea of Progress*, 1928, pp. 44–49, 78–97; Richard F. Jones, "The Background of the *Battle of the Books*" (*Washington University Studies*, Humanistic Series, vol. VII, No. 2, 1920, pp. 104–16), and *Ancients and Moderns*, pp. 23–42.

no means confined to science, but the latter opposed it more vigorously and consistently than any other antagonist, and when condemnation of the idea is found in conjunction with other characteristics of the scientific movement, it may very well be ascribed to the influence of the latter.

Indeed, most of the ideas and attitudes which I have attributed to the influence of science may occasionally be found in non-scientific quarters, but nowhere were they given the publicity nor so widely and so earnestly advocated as by the scientists. The experimental philosophy literally had to fight its way through to final acceptance, and when it emerged victorious, its recognized importance and prestige gave added force to each of its constituent elements. Furthermore, it may be noted that in regard to the critics discussed in this article no idea has been ascribed to the influence of the scientific movement except when attended by a clear and unmistakable reference to it.

In showing the influence of science on the literary criticism of the neo-classical period, I do not in any way wish to imply that it was the only liberalizing agent active at this time. Literary history is complex, and its phenomena are not to be explained by a formula nor reduced to the simplicity of a diagram. The character of neo-classicism in England was by no means homogeneous. There were inconsistencies and contradictions, uncertainties and doubts. For the most part, the age found itself in a critical dilemma, inasmuch as it had intellectually embraced a critical creed which did not justify its literary tastes. Dryden says: "Impartially speaking, the French are as much better critics than the English, as they are worse poets." And yet the French poets had conformed much more closely to the rules laid down by their critics than the English, especially the Elizabethans, whom Dryden has chiefly in mind. The age tried to escape from its dilemma through its beauties-and-faults criticism, in which beauties were referred to taste, and faults to the rules, but inevitably the beauties cast suspicion upon the faults. Throughout the period Shakespeare, Spenser, and other poets exerted an unremitting pull upon the closed circle of critical dogma, from which they had been excluded, but which under their influence was slowly widening to encompass them. When to this fact is added the strong nationalistic spirit which resented the spectacle of English poets being devastated by a criticism essentially foreign, or, as one critic puts it, English

poets being tried by a foreign jury, we can easily see that there were other forces moving in the same direction as the one which we have been discussing. But disregarding the question of the relative strength of the influence which the scientific movement exerted on criticism, we may safely assert that when the experimental scientists of the seventeenth century went forth under the banner of liberty and progress to wage war on authority, they were battling for more causes than their own.

Washington University

GRESHAM COLLEGE: PRECURSOR OF THE ROYAL SOCIETY

By Francis R. Johnson

Of paramount interest to all students of the history of ideas is the development, in the seventeenth century, of formally organized scientific societies from the informal gatherings of devotees of science that preceded them. Today we can see clearly that one of the causes for the relative stagnation of science in Western Europe during the Middle Ages is that new findings—and there were many new facts of nature brought to light during this period[1]—too often perished with their discoverers or were buried in manuscripts which, being available to few other investigators, gave little impetus to further progress. We likewise recognize that the remarkably accelerated advance of science from the seventeenth century onward was due in no small measure to the increased rapidity with which scientific information came to be transmitted not only among the scientists of separate localities and nations, but among investigators dispersed throughout the Western World. The importance of the first permanent scientific societies in this dissemination and interchange of scientific ideas and discoveries is universally conceded, and many valuable histories have been devoted to the careers of those organizations that survived. Insufficiently explored, however, either in the initial chapters of these histories or elsewhere, are the earlier attempts at co-operative endeavor[2]—the groups

[1] For numerous illustrations of important scientific discoveries from the tenth to the sixteenth centuries, see Lynn Thorndike, *A History of Magic and Experimental Science*, Vols. I & II (New York, 1923), Vols. III & IV (New York, 1934); *Science and Thought in the Fifteenth Century* (New York, 1929).

[2] A third edition has recently appeared of the invaluable pioneering survey of the contributions of the scientific societies in the seventeenth century: Martha Ornstein's *The Rôle of Scientific Societies in the Seventeenth Century* (Chicago, 1938; the first edition was published posthumously in 1913). A new edition at this time is a witness to the soundness of Miss Ornstein's work within the scope that it set for itself, and a recognition of the intrinsic importance of the subject. On the other hand, it proclaims how few works, in the interval of twenty-five years, have sought to delve more deeply into the subject that she explored. Several of the French groups devoted to scientific inquiry have been admirably dealt with by Harcourt Brown in *Scientific Organizations in Seventeenth-Century France, 1620–1680* (Baltimore, 1934). Dorothy Stimson's article, "Dr. Wilkins and the Royal Society," *Journal of Modern History*, III (1931), 539–63, has analyzed and discussed the accounts of the

which met together without formal organization or royal charter, and thus sowed the seed and nurtured the immature plant of scientific association until it became firmly rooted.

Our concern here is with England, and the evolution there of groups promoting the association and co-operation of men sharing an active interest in science. Historians of the Royal Society recognize that its formal establishment in 1660 and the granting to it of a royal charter in 1663 was but the culmination of a series of regular gatherings of scientifically-minded men in London and in Oxford. The familiar accounts of the origin of the Society trace these antecedent gatherings back as far as the year 1645, when a group which included several of the Society's later founders were meeting regularly in London after the astronomy lecture at Gresham College, and usually in the rooms of the Gresham Professor of Astronomy.[3] The purpose of this article is to present evidence indicating that these meetings of English scientists went back to a period much earlier than 1645, and that by long tradition gatherings of this sort for the interchange of information and the witnessing of experiments had centered about Gresham College and its professors of astronomy and geometry.

The intimate connection between Gresham College and the Royal Society during the first fifty years of the latter's existence is familiar to all who have had occasion to investigate the history, the science, or the literature of England during the late seventeenth century. Except for a period of seven years following the great fire of London in 1666, which destroyed the Royal Exchange and resulted in the temporary housing of the former tenants of the Exchange in the Gresham College buildings, Sir Thomas Gresham's foundation provided a meeting-place for the Royal Society and quarters for its library and scientific collections from the beginning until the year 1710, when the society purchased a building of its own. In the literary works of the day, the early fellows of the Royal Society were colloquially known as "Greshamites" or "Men

origin of the Royal Society of London. But, for England in the early seventeenth century, we need a comprehensive and detailed study similar to Harcourt Brown's for France. The present article's modest aim is to make one small contribution to this end and to indicate profitable lines of further investigation which can be followed out whenever research in English archives again becomes possible.

[3] The best accounts of the origin of the Royal Society are in C. R. Weld, *A History of the Royal Society* (2 vols.; London, 1848), I, chaps. i–iv, and in *The Record of the Royal Society of London* (3d ed.; London, 1912), pp. 1–22.

of Gresham." The Gresham College professors—not only those holding the three scientific chairs of Astronomy, Geometry, and Physic, but several others as well—were among the most active of the Royal Society's early members. Thus the two organizations were linked together by both membership and locality, and finally (and in consequence) by popular imagination.

The younger of these organizations, the Royal Society, was formally established in 1660. The elder, Gresham College, began its active career in 1598, with the distinguished mathematician Henry Briggs as its first professor of geometry. From this time on, Gresham College, with an unbroken line of enthusiastic mathematical scientists among its professors, and with its central location in London, offered an ideal rendezvous where those engaged in scientific pursuits could meet with others who shared their interests, exchange news concerning the latest investigations and discoveries, and gain the stimulus that comes from association with eager fellow-workers. That English scientists should wait until 1645 before taking advantage of such opportunities seems inconceivable. We should expect that the natural course of events, as each decade passed, would make Gresham College increasingly important as a gathering-place for scientists, so that by the 1640's Englishmen interested in the "new philosophy" would have been long enough in the habit of assembling informally there to make the custom a well-established tradition. A group having so secure an anchor as Gresham College would not require the stabilizing force of formal organization to maintain a continued existence through all the fluctuations in membership that the passage of time would bring about. Suppose, then, that in 1645 or thereabouts, a few energetic and enthusiastic young men were admitted to the group, and this generation among the membership was the only one which survived to become the leaders in the founding of the Royal Society. These young recruits of 1645, looking back late in life, would naturally tend to date the origin of the meetings which grew into the Royal Society from the time of their first participation in them.

The hypothesis that I have just sketched postulates the gradual and uninterrupted evolution of an informal club, if we may so call it, composed of Englishmen interested in science—a club which constantly had as its nucleus one or more Gresham professors and his friends, and which had Gresham College as its usual meeting

place. This hypothesis is contrary to the generally accepted account, which implies that the group which Robert Boyle described as the "Invisible College" came suddenly into being about 1645, the result of the enthusiasm of a few young men for scientific investigation, combined with their desire to escape, occasionally, from the political and religious turmoils of the day. Let us see what evidence can be offered in favor of this newly proposed hypothesis.

We may begin by examining the evidence upon which the accepted theory is based, to see whether the known facts will bear the new interpretation that is proposed. The first official account of the Royal Society, Thomas Sprat's *The History of the Royal-Society of London* (1667), states that the foundation of the Society was laid, not in London in 1645, but in the Warden's (John Wilkins's) lodgings at Wadham College, Oxford, in 1649.[4] Since Sprat's *History* was written under the supervision of Wilkins, then secretary of the Society, this version has his authority and represents his point of view. John Wallis, on the other hand, traces the origin of the Society to meetings at Gresham College in London about 1645. Although the existence of such meetings is confirmed by references in Robert Boyle's letters of October 22, 1646, and January 20, 1646/7,[5] Wallis remains our only first-hand witness for the date, the place, and the membership of the group.[6] As Miss Stimson has shown,[7] the accounts of Wilkins and Wallis may easily be reconciled by assuming that Wilkins considered the meetings at Oxford to have a superior claim to recognition because there the group was formally organized and kept minutes, and thus provided a precedent for the organization of a society in London after most of the Oxford contingent had returned to the capital.

It is to Wallis's statements, therefore, that we must turn. In 1678 Wallis, in a pamphlet entitled *A Defence of the Royal Society:*

[4] *Op. cit.*, p. 53.

[5] Robert Boyle, *Works*, ed. T. Birch (London, 1744), I, 20. It seems certain that Boyle refers to the same group that Wallis describes.

[6] Anthony Wood, in his enlarged English translation of his *Historia et Antiquitates Universitatis Oxoniensis* (1674), *History and Antiquities of Oxford*, ed. J. Gutch (Oxford, 1786), II, Part ii, 632–33, apparently derives his information from Wallis's *Defence* (1678). The original Latin edition of 1674 does not contain the reference asserting the prior claims of the 1645 meetings against the version given in Sprat's *History*.

[7] "Dr. Wilkins and the Royal Society," *JMH*, III, 544–47.

An Answer to the Cavils of Doctor William Holder,[8] gave an account of the circumstances surrounding these early meetings:

I take its [the Royal Society's] first Ground and Foundation to have been in London about the year 1645 (if not sooner) when the same Dr. Wilkins (then Chaplain to the Prince Elector Palatine, in London), Dr. Jonathan Goddard, Dr. Ent (now Sir George Ent), Dr. Glisson, Dr. Scarbrough (now Sir Charles Scarbrough), Dr. Merrit, with myself and some others, met weekly (sometimes at Dr. Goddard's Lodgings, sometimes at the Mitre in Wood-street hard by) at a certain day and hour, under a certain Penalty, and a weekly Contribution for the Charge of Experiments, with certain Rules agreed upon amongst us. Where (to avoid diversion to other discourses, and for some other reasons) we barred all Discourses of Divinity, of State-Affairs, and of News (other than what concern'd our business of Philosophy) confining our selves to Philosophical Inquiries, and such as related there-unto; as Physick, Anatomy, Geometry, Astronomy, Navigation, Staticks, Mechanicks, and Natural Experiments. . . .

These meetings we removed, soon after, to the Bull-head in Cheapside and (in Term-time) to Gresham Colledge, where we met weekly at Mr. Foster's Lecture (the Astronomy-Professor there) and after the Lecture ended, repaired sometimes to Mr. Foster's Lodgings, sometimes to some other place not far distant, where we continued such Inquiries; and our Numbers encreased.[9]

But a more detailed account of these early meetings was given by Wallis in 1697, when, at the age of eighty, in an "account of some passages in his own life," he set forth in these words his own recollection of the circumstances leading to the Society's establishment:

About the year 1645, while I lived in *London* (at a time when, by our Civil Wars, Academical Studies were much interrupted in both our Universities:) beside the Conversation of divers eminent Divines, as to matters Theological; I had the opportunity of being acquainted with divers worthy Persons, inquisitive into Natural Philosophy, and other parts of Humane Learning; And particularly of what hath been called the *New Philosophy* or *Experimental Philosophy*.

We did by agreement, divers of us, meet weekly in *London* on a certain day, to treat and discourse of such affairs. Of which number were *Dr. John Wilkins* (afterward *Bp. of Chester*), *Dr. Jonathan Goddard, Dr. George*

[8] Dr. Holder had stated that "the first ground and foundation of the Royal Society" had been laid at Oxford in 1649. See J. F. Scott, *The Mathematical Work of John Wallis* (London, 1938), p. 9.

[9] Pp. 7–8.

Ent, Dr. Glisson, Dr. Merret, (Drs. in Physick), Mr. Samuel Foster then Professor of Astronomy at *Gresham College, Mr. Theodore Hank* [Haak] (a German of the *Palatinate,* and then Resident in London, who, I think, gave the first occasion, and first suggested those meetings) and many others.

These meetings were held sometimes at *Dr. Goddard's* lodgings in *Wood-street* (or some convenient place near) on occasion of his keeping an Operator in his house for grinding Glasses for Telescopes and Microscopes; and sometime at a convenient place in *Cheap-side;* sometime at Gresham College or some place near adjoyning. . . .

About the year 1648, 1649, some of our company being removed to *Oxford* (first *Dr. Wilkins,* then I, and soon after *Dr. Goddard*) our company divided. Those in *London* continued to meet there as before (and we with them, when we had occasion to be there;) and those of us at *Oxford;* with *Dr. Ward* (since *Bp. of Salisbury*) *Dr. Ralph Bathurst* (now *President of Trinity College in Oxford*) *Dr. Petty* (since *Sr. William Petty*) *Dr. Willis* (then an eminent Physician in *Oxford*) and divers others, continued such meetings in *Oxford;* and brought those studies into fashion there; meeting first at *Dr. Pettie's* Lodgings, (in an Apothecarie's house) because of the convenience of inspecting Drugs, and the like, as there was occasion: and after his remove to *Ireland* (tho' not so constantly) at the Lodgings of *Dr. Wilkins,* then Warden of *Wadham Coll.* And after his removal to *Trinity College in Cambridge,* at the Lodgings of *the Honorable Mr. Robert Boyle,* then resident for divers years in *Oxford.*

Those meetings in *London* continued, and (after the King's Return in 1660) were increased with the accession of divers worthy and Honorable Persons: and were afterwards incorporated by the name of the *Royal Society.*[10]

For the years immediately preceding 1660, Wallis's account needs supplementing from Sprat's narrative, which gives further particulars and adds the names of those who in 1658 were active members of the London group. Sprat says that the meetings at Oxford continued until about 1658, but in that year,

those [at Oxford] being called away to several parts of the nation, and the greatest number of them coming to London, they usually met at Gresham College at the Wednesday's and Thursday's lectures of Dr. Wren and Mr. Rooke; where there joyn'd with them several eminent persons of their common acquaintance: The *Lord Viscount Brouncker,* the now *Lord Brereton,*

[10] From a letter by Wallis addressed to Dr. Thomas Smith, dated January 29, 1697; published by Thomas Hearne in his edition of *Peter Langtoft's Chronicle* (2 vols.; Oxford, 1725), "The Publisher's Appendix to His Preface," I, clxi–clxiv.

Sir Paul Neil, Mr. John Evelyn, Mr. Henshaw, Mr. Slingsby, Dr. Timothy Clark, Dr. Ent, Mr. Hall, Mr. Hill, Dr. Crone, and diverse other gentlemen, whose inclinations lay the same way. This custom was observed once, if not twice a week, in term-time; till they were scattered by the miserable distractions of that fatal year; till the continuance of their meetings there might have made them run the hazard of the fate of *Archimedes:* for then the place of their meeting was made a *quarter for soldiers.*[11]

To this evidence we must add one more document, the memorandum of the meeting of this group held on November 28, 1660, at which steps were taken to organize it as a scientific society. This memorandum reads:

These persons following, according to the usual custom of most of them, mett together at Gresham Colledge to heare Mr. Wren's lecture, viz. The Lord Brouncker, Mr. Boyle, Mr. Bruce, Sir Robert Moray, Sir Paul Neile, Dr. Wilkins, Dr. Goddard, Dr. Petty, Mr. Ball, Mr. Rooke, Mr. Wren, Mr. Hill. And after the lecture was ended, they did, according to the usual manner, withdrawe for mutuall converse. Where amongst other matters that were discoursed of, something was offered about a designe of founding a Colledge for the promoting of Physico-Mathematicall Experimentall Learning. And because they had these frequent occasions of meeting with one another, it was proposed that some course might be thought of, to improve this meeting to a more regular way of debating things, and according to the manner in other countryes, where there were voluntary associations of men in academies, for the advancement of various parts of learning, so they might doe something answerable here for the promoting of experimentall philosophy.

In order to which, it was agreed that this Company would continue their weekly meeting on Wednesday, at 3 of the clock in the tearme time, at Mr. Rooke's chamber at Gresham Colledge; in the vacation, at Mr. Ball's chamber in the Temple.[12]

Upon the accounts that I have just quoted at some length rests the case for the inception of the Royal Society at the informal gatherings of the year 1645, and also for the tracing of the Society's development from the time of those gatherings until its founding in 1660. Are these accounts inconsistent with the hypothesis that the meetings taking place in 1645 were not a new venture—that the date merely marked the accession of a few new and youthful members to a long-established coterie of scientifically-minded Englishmen? If we analyze Wallis's statements we observe that in both accounts he is not precise about the date—it was "1645, if not

[11] *History of the Royal-Society of London* (1667), p. 57.

[12] Quoted from the Journal-book, I, 1, in *The Record of the Royal Society of London,* pp. 7–8.

sooner." This is not surprising, since one report was written more than thirty years after the event, and the other more than fifty years afterward, when Wallis was over eighty years old. In 1645 he was a young man of twenty-nine who, after receiving his M.A. in 1640 at Emmanuel College, Cambridge, had come to London late in 1641 as chaplain to Lady Vere. Certainly Wallis nowhere claims to have had a share in launching the meetings of scientists that followed the weekly astronomy lecture at Gresham College. Instead, he apparently found the group already well established before he joined their circle, since he reports, at second hand, the conjecture that Theodore Haak, who came to England in 1625, had been the first to suggest these assemblies.[13] Naturally enough, the members of this group that Wallis, many years later, recalled and included in his partial list were those who lived on to become members of the Royal Society and take a prominent part in the activities of its early years. This, under the circumstances, was only natural. Natural enough, also, was the fact that his list, in consequence, included men who, like himself, were in 1645 still young enough to be just reaching their prime in the 1660's. Of the men he mentions, both of the London and the later Oxford group, all except Samuel

[13] The notion that Theodore Haak was the one who had originally inspired the meetings of this group has, so far as I can discover, Wallis's statement in 1697 as its only source, and Wallis there does not assert it as a fact, but merely throws it out as a supposition of his own. It may have been Haak that first introduced Wallis to the group, for Wallis at the time (1644–46) was secretary to the Westminster Assembly of Divines, and Haak was engaged in translating the Dutch annotations to the Bible for this Assembly. That Haak, for some years, had been associated with a group of English scientists and served as a link with scientists on the continent seems certain, but that he was the prime mover in the meetings at Gresham College awaits proof. See Harcourt Brown, *Scientific Organizations in Seventeenth-Century France*, chap. iii, for an account of Haak's correspondence with Mersenne, which indicates that as early as 1639–40 Haak was acting as corresponding secretary for an informal group of English scientists which definitely included John Pell and Gabriel Plattes. What the relations of these men were to the Gresham College circle could probably be determined by a detailed study of the Haak-Mersenne correspondence from this point of view, together with an examination of the Pell manuscripts in the British Museum. I have not had the opportunity to make such a study, but these points in Mr. Brown's description of the Haak material are worth noting for the clues they may give to some other investigator: 1. Haak sent Mersenne Gellibrand's book, *The Variation of the Magneticall Needle* (see below, pp. 433–4). 2. There is a reference in the correspondence to a Mr. Harrison and his method of making catalogues and indices. This may be the same person as the unidentified Harrison who assisted at Gellibrand's magneticall experiments described below p. 433. 3. There are references to John Greaves, who at that time was Gresham Professor of Geometry, but was absent much of the time in foreign travel in the Near East pursuing Oriental studies.

Foster lived to become fellows of the Royal Society. Of these, all except George Ent (b. 1604) and Francis Glisson (b. 1597) were young men who were under thirty or had just reached their thirty-first year.[14]

Wallis had a special reason for including Samuel Foster while omitting all others who failed to live on into the Restoration period. Foster, a generation older than Wallis, was in 1645 professor of astronomy at Gresham College, and it was in his lodgings, after his Wednesday lecture, that the meetings of this group were customarily held.

Foster died in 1652, but the later accounts prove that the established time and place of meeting of the club, if we may call it so, were not altered. The group continued to gather each Wednesday afternoon in term-time at the astronomy lecture of Foster's successor, Lawrence Rooke, and to repair afterwards to Rooke's lodgings for their meeting. When, in 1657, Rooke transferred from the astronomy professorship to that of geometry, and was succeeded as Gresham Professor of Astronomy by the brilliant young Christopher Wren, then only twenty-five, the group met often twice a week, both after Wren's lecture, on Wednesday, and Rooke's Thursday lecture. And it was at a regular Wednesday meeting, following Wren's lecture, that the resolution was taken to establish an organized society to replace their regular, but hitherto informal gatherings.

Clearly, then, for the fifteen years from 1645 to 1660, the assembling of this group of persons interested in science centered, as if by long tradition, about Gresham College and its Professors of Astronomy, regardless of the incumbent at the moment. Moreover, a careful analysis of these basic accounts of the Royal Society's origin impels one to ask when the real inception of these

[14] For biographical discussions concerning the relations between the men cited by Wallis as members of the group in 1645, see the excellent articles by Dorothy Stimson: "Dr. Wilkins and the Royal Society," cited above; "Puritanism and the New Philosophy in 17th Century England," *Bulletin of the Institute of the History of Medicine,* III (1935), 321–34; "Comenius and the Invisible College," *Isis,* XXIII (1935), 373–88. In these articles Miss Stimson shows that most of the young men mentioned had come from colleges at Oxford and Cambridge which were strongholds of Puritanism, and that in the religious and political struggles of the times their sympathies were with the moderates among the Puritans who supported Parliament against the King but did not succumb to the violent hatreds of the period of the civil war. Her most recent article, appearing after this study was written, is "Amateurs

scientific meetings at Gresham College took place. To this question I do not pretend to be able to give a definite answer, with a specific date. Indeed, so gradual and so natural was the growth of an informal scientific group about the successive Gresham College professors that, even if we could call back the participants for questioning, they would probably disagree in their choice of the specific action that marked the beginning of their continued association. We may, however, attempt to chart a few landmarks in the evolution of collaborative scientific study in England, well aware of the multitude of details that will be lacking, leaving the resulting map tantalizingly inadequate and incomplete. But such a chart will be a rough guide for the thorough history of the antecedents of the Royal Society that may be written when English archives can again be peacefully studied by scholars. In preparing this rather crude chart, we may best turn back to the founding of Gresham College,[15] and from there proceed forward.

Sir Thomas Gresham, the famous financial adviser to Queen Elizabeth and the founder of the Royal Exchange, died in 1579. In his will, dated four years earlier, he bequeathed all the revenues from the land and buildings comprising the Royal Exchange, and also his great mansion house in Bishopsgate Street, jointly to the City of London and the Company of Mercers. In return, they were charged with supporting from the revenues of the Royal Exchange seven professors, who were to be lodged in his mansion house and there to read public lectures in their respective faculties of Law, Rhetoric, Divinity, Music, Physic, Geometry, and Astronomy. The will reserved to his wife, for so long as she should live, the use of the mansion house and all the revenues from the Exchange. Since Lady Gresham did not die until December of 1596, the City of

of Science in 17th Century England," *Isis*, XXXI (November, 1939), 32–47. In this article she sums up much of the material presented in the others cited above, and accepts the thesis here advanced: that the meetings mentioned by Wallis as the precursor of the Royal Society may be traced back to a period much earlier than 1645 (see pp. 36 and 40 ff.). Miss Stimson, however, does not attempt to present evidence for earlier gatherings of scientists at Gresham College, since that is not the subject of her article.

[15] The account of the founding of Gresham College is based primarily upon John Ward's preface to his *Lives of the Professors of Gresham College* (London, 1740). Ward was a professor of rhetoric at Gresham and had full access to the records of the college in producing this work, which had the official approval of Gresham College.

London and the Mercers' Company did not come into possession until 1597, and it was not until Michaelmas term of 1598 that the seven professors were installed in full possession of Gresham's mansion house, now become Gresham College, and commenced the reading of their lectures.

The opening of Gresham College was the culmination of a long effort in Elizabethan England to bring about the establishment of a permanent, endowed foundation which would offer instruction and further research in the mathematical sciences and provide a convenient rallying point for all who were concerned with promoting progress in the practical application of these sciences to useful works. Lectureships in medicine had, early in the sixteenth century, been founded at Cambridge and Oxford,[16] and a lectureship in surgery in connection with the Royal College of Physicians had been founded by John, Baron Lumley, in 1583. But for astronomy and geometry, the first enduring recognition came with the creation of professorships in those subjects in Sir Thomas Gresham's foundation. Not until 1619 were the Savilian Professorships of Astronomy and Geometry established at Oxford, and the early incumbents of these Savilian Professorships were chosen from men then holding chairs at Gresham College. For example, the first two Gresham Professors of Geometry, Henry Briggs and Peter Turner, became in turn the first two Savilian Professors of that subject, and John Greaves, the third Gresham professor, became the second Savilian Professor of Astronomy.

Since in the Gresham professorships of astronomy and geometry England received the first enduring institution dedicated to the mathematical sciences, and one which served as a rallying point for all who were interested in those subjects, it will not be out of place, before proceeding, to consider and dismiss briefly the other organizations which have been proposed as precursors of the Royal Society. Weld mentions only three English precursors.[17] The first is the Society of Antiquaries supposedly founded in 1572 by Archbishop Parker and dissolved by James I in 1604. Its interests were antiquarian and philological, and its aims, though allied to the scientific movement, were not identical with it. The second of

[16] In 1518 Thomas Linacre founded lectureships in medicine at Merton College, Oxford, and St. John's College, Cambridge.

[17] *Op. cit.*, I, 15–23.

Weld's societies was the abortive scheme of Edmund Bolton for founding a Royal Academy in England, first broached in 1617 to please the vanity of James I. As the plan developed—it was never completed, and was dropped after the death of King James—membership in the academy was to be limited to the nobility and wealthy gentry—a group composed entirely of dilettantes rather than of serious scientific workers. The third organization mentioned by Weld is worthy of more consideration than Bolton's scheme. This is Sir Francis Kynaston's *Musaeum Minervae,* a college to be erected in Covent Garden for the education of the youth of noble families. Kynaston received in 1635 a royal license for its founding, and this license names the men who were to hold its six professorships of Medicine, Languages, Astronomy, Geometry, Music, and Fencing. *The Constitutions of the Musaeum Minervae,* a rare pamphlet giving further details concerning this academy, was published in 1636. But, being designed solely for the education of noble youth adhering to the Royalist party, it died an early death amid the turmoil of the times, and left no discernible mark of its influence.

As precursors of the Royal Society none of these, except perhaps the first, can claim any real significance. The two latter contributed nothing to the advancement of science, and their real interest lies solely in their being examples of attempts to secure royal patronage for an educational institution in which scientific instruction was ostensibly to be given some place. Compared with Gresham College, which was a center of scientific activity in London from the beginning of the seventeenth century, these societies are not deserving of a moment's consideration.[18]

Of far greater import, however, was the success of John Dee, in the period beginning with the accession of Elizabeth and continuing until Dee's departure for the continent in 1583, in gathering about him a group of friends and pupils which, in effect, constituted a sort of scientific academy. Courtiers like Sir Philip Sidney and Sir Edward Dyer came to Dee's house at Mortlake to receive in-

[18] Another early proposal for an educational institution allotting an important place to science was Sir Humphrey Gilbert's plan, drawn up in 1572, for an *Academy* for the education of the sons of nobles and gentlemen; see MS Lansdowne 98 (1), printed in Early English Text Society, Extra Series, VIII (London, 1869), 1–12. This is not mentioned by Weld.

struction in science.[19] Lord Burghley and the Queen herself visited and consulted him. Thomas Digges, the first modern astronomer to portray an infinite, heliocentric universe with the stars scattered at varying distances throughout infinite space, was successively a ward, pupil, and intimate friend and co-worker of Dee's. Among the others who were associated with Dee and received scientific instruction and advice from him were almost all the names famous in Elizabethan exploration and discovery—Richard Chancellor, William and Stephen Borough, Martin Frobisher, Sir Humphrey Gilbert, John Davis, and Sir Walter Raleigh. Dee, through his acquaintance and correspondence with the most eminent scientists on the continent, such as Gemma Phrysius, Mercator, Ortelius, and Orontius Finaeus, kept the English group in constant touch with new ideas and discoveries originating abroad. His own library of scientific books and manuscripts, consisting in 1583 of over 4,000 volumes, was always at the disposal of Dee's fellow-scientists. Nor must one forget the great collection of scientific instruments that Dee possessed, including the huge *radius astronomicus* that he had designed in collaboration with Richard Chancellor and which Thomas Digges had doubtless used in making a set of observations on the new star of 1572 which were far more accurate than any others save Tycho Brahe's.

As a coterie of scientific workers maintaining active co-operation among themselves, providing instruction for others, and keeping in close touch with scientific activity abroad, the group centering about John Dee must be ranked as the earliest ancestor of the Royal Society to contribute significantly to its patrimony. Less important than Dee's group, yet of greater moment than the societies, actual and proposed, mentioned by Weld, is the Mathematical Lecture established in London in 1588, the year of the Spanish Armada. Whereas earlier efforts to obtain public endowment for a lecture had been unavailing, the national crisis stirred a slothful government to sudden, energetic action. On the plea that some mathematical instruction was urgently needed for the untrained officers of the militia mustered for the defense of London, the wealthy merchants of the city, inspired by Thomas Smith, later the first governor of the East India Company, were persuaded to contribute to the

[19] For a further account of the group centering about John Dee and its importance to science in sixteenth-century England, see Francis R. Johnson, *Astronomical Thought in Renaissance England* (Baltimore, 1937), pp. 134–40 and *passim*.

sum necessary to support such a lecture for two years. Thomas Hood, a Londoner and a graduate of Cambridge, was chosen as lecturer. When the two-year term expired, however, the crisis was over, and, although funds were finally raised to continue the lectures for another two years, they were abandoned thereafter.[20]

These early institutions and informal societies for the advancement of scientific learning have been described at this length because they deserve a place which they have not hitherto received in the accounts of the forerunners of the Royal Society. We now return to the Royal Society's immediate ancestry, and to the institution which contributed, far more than any other, to its ultimate development—Gresham College.

In his will, Sir Thomas Gresham had provided that the professors of his foundation should be unmarried, should occupy his mansion house and have free use of its gardens and all other appurtenances, and that each professor should receive an annual stipend of fifty pounds, a handsome salary in those days.[21] The Mercers' Company was charged with the original selection and the payment of the professors of law, physic, and rhetoric, and the Mayor and Aldermen of the City of London with the selection and payment of the professors of divinity, music, geometry, and astronomy.

Soon after the death of Lady Gresham brought this benefaction under their control, the City of London and the Mercers' Company sent out letters to Oxford and Cambridge Universities asking for the recommendation of suitable candidates for the posts that had been placed in their charge.

In the final choice of the seven original professors, the two universities were equally represented (John Bull, the first music professor, was a graduate of both). The first professor of astronomy was Edward Brerewood, an Oxford man. The first geometry professor was Henry Briggs, a graduate of St. John's College, Cambridge, and one of the ablest mathematicians of the day. His contribution to the development of logarithms is familiar to all, for it was he who saw the great practical advantage of using the number ten as a base, and devoted his energies to computing the Briggsian tables of logarithms, and to popularizing the use of logarithms throughout the scientific world.

[20] For a detailed account of Hood's Mathematical Lectureship, see Johnson, *op. cit.*, pp. 198–205.

[21] Ward, *op. cit.*, preface.

To Briggs, more than to anyone else, was due the immediate establishment of Gresham College as a meeting place of scientists and a clearing-house for scientific information. The comfortable and spacious quarters of the Gresham professors, the central location of the college in London, and the eminence of Briggs himself all contributed toward this end. Briggs was the friend and the collaborator of most of the noted scientists of his day. Thomas Blundeville, Sir Thomas Chaloner, William Barlowe, Marke Ridley, Edward Wright, and William Gilbert were among the leading English scientists with whom Briggs was associated. The relations of this group may be traced in the scientific publications of the day, and in other contemporary records.

Gilbert acknowledges help from Barlowe in the research on magnetism that was set forth in his *De Magnete*.[22] Edward Wright, whose great work was the reform of the theory of navigation and the correction of Mercator's projection,[23] contributed an important preface to Gilbert's work. Blundeville, in a work of his own published in 1602,[24] included an appendix by Gilbert, describing two magnets he had invented, and Briggs, to this appendix, contributed a table which he had calculated for the use of these magnets. Both Wright and Briggs co-operated in making Napier's invention of logarithms known to English mathematicians. Wright translated Napier's book on logarithms into English immediately,[25] and Briggs added a special preface to the work, together with a short treatise of his own on the methods of interpolation when using the tables. In this preface, Briggs mentions his teaching "the meaning and the use of this booke at Gresham house."[26]

[22] See William Barlowe, *Magneticall Aduertisements* (London, 1616), sigs. N4^{r}–N4^{v}.

[23] *Certaine Errors in Nauigation* (London, 1599).

[24] *The Theoriques of the seuen Planets* (London, 1602). Blundeville had also, in his *Exercises* (London, 1594), published an advance notice of Wright's correction of Mercator's projection, which Wright first published in *Certaine Errors of Nauigation* (1599).

[25] *A Description of the Admirable Table of Logarithmes* (London, 1616). Napier's work first appeared in 1614.

[26] *A Description of the Admirable Table of Logarithmes*, sig. A6^{r}. Briggs also prepared tables which were appended to Edward Wright's *Certaine Errors* in the second edition (London, 1610).

Another noted member of this group was William Bedwell, one of the most learned men of his day, the father of Arabic studies in England, and one of the Westminster Company of translators who prepared the King James version of the Bible. Bedwell was also a mathematical scholar, and published a number of mathematical works and translations, chief among these being a translation of Peter Ramus's geometry, greatly enlarged by Bedwell himself.[27] In 1601 Bedwell became rector of St. Ethelburga's in Bishopsgate Street, close by Gresham College. Thus a friendship with Briggs born of common interests, which probably had begun at Cambridge —for the two were contemporaries there[28]—was cemented and continued throughout both their lives. In 1606 Briggs sent to Mr. Clerke of Gravesend a description of a special type of ruler invented by Bedwell.[29] His correspondence was probably with the John Clerke who, in 1636, after the death of both Briggs and Bedwell, published his friend Bedwell's book, dedicating it to John Greaves, who had become professor of geometry at Gresham College in 1631, just a year before Bedwell's death. This preface indicated that Greaves's short but happy friendship with Bedwell dated from the time Greaves came from Oxford to London in 1630 to assume his duties at Gresham College.[30] Bedwell, in his own preface, mentions his friendship with Briggs, and states that Briggs had examined the work and had repeatedly urged him to publish it.[31]

Still another distinguished member of the Gresham College circle in Briggs's time, and later, was the famous mathematician William Oughtred, who made important contributions to mathematical notation and invented the rectilinear and circular slide rules. By his private teaching Oughtred greatly furthered the progress of mathematical knowledge in England, and he numbered among his pupils Seth Ward and John Wallis. Oughtred, from 1610 to his death in 1660, was rector of Albury, near Guildford in Surrey, and on each of his journeys to London visited his friends at Gresham College. In a pamphlet published in 1633, he describes a visit made in 1618:

[27] *Via Regia ad Geometriam* (London, 1636).

[28] Briggs took his B.A. in 1581 and his M.A. in 1585 at St. John's and remained as a Fellow of his college. Bedwell proceeded B.A. in 1585, M.A. 1588 at Trinity.

[29] Ward, *op. cit.*, p. 129.

[30] *Via Regia ad Geometrium*, sigs. A3^{r}–A4^{r}.

[31] *Ibid.*, author's preface.

In the Spring 1618 I being at London went to see my honoured friend Master *Henry Briggs* at Gresham Colledge: who then brought me acquainted with Master *Gunter* lately chosen Astronomie reader there, and was at that time in Doctour *Brooks* his chamber. With whom falling into speech about his quadrant, I shewed him my Horizontall Instrument: He viewed it very heedfully: and questioned about the projecture and use thereof, often saying these words, it is a very good one. And not long after he delivered to Master *Briggs* to be sent to me mine owne Instrument printed off from one cut in brasse: which afterwards I understood he presented to the right Honourable the Earle of Bridgewater, and in his booke of the Sector printed sixe yeares after, among other projections he setteth down this.[32]

Oughtred is writing nearly fifteen years after his visit, and gives the erroneous impression that in 1618 Gunter was already Gresham Professor of Astronomy. It is worth noting, therefore, that Oughtred found Gunter, who was not elected professor until the following March, occupying rooms in Gresham College.

From the early years of the seventeenth century there is evidence of a close association, in scientific investigations, of the Gresham College professors and the sea captains, the shipbuilders, and the administrative officials of the English Navy. Briggs, in 1609, served with Sir Thomas Chaloner in judging a controversy between two factions among the shipwrights over some innovations in design which Phineas Pett had introduced.[33] John Clerke, whom we have seen as the friend and correspondent of Bedwell and Briggs, is probably the John Clerke who, in 1628, is found sharing with one John Cowper the grant of the office of Surveyor and Keeper of His Majesty's Armoury in the Tower and at East Greenwich.[34]

In 1619, just before Briggs left Gresham College to become the first Savilian Professor of Geometry at Oxford, Edmund Gunter was chosen Gresham Professor of Astronomy. Gunter must have begun, at Brigg's instigation, the work of calculating the logarithms of the trigonometric functions even before his election, for his

[32] *The just Apologie of Wil: Oughtred, against the slaunderous insimulations of Richard Delamain, in a Pamphlet called Grammelogia, or the Mathematicall Ring* (London, 1633), sigs. B3^{v}–B4^{r}.

[33] *The Autobiography of Phineas Pett*, ed. W. G. Perrin, Navy Records Society Publications, Vol. 51 (London, 1918), pp. lxxxii and 59 ff.

[34] *Calendar of State Papers, Domestic, Charles I*, Vol. CXIX, No. 33 (October 27, 1628).

Canon Triangulorum was published early in 1620. After Briggs's departure for Oxford, Gunter became the central figure of the Gresham College scientific circle, and continued so until his death in December, 1626. With Gunter, the association of Gresham College and its circle with a group of navy officials stationed at the naval base across the Thames at Deptford continued.

The key figure uniting the two groups was an able mathematician and scientist, John Wells, who, from 1606 until his death late in the year 1635, held the important office of Keeper of His Majesty's Naval Stores at Deptford. He was a friend and fellow-worker successively of Briggs, Gunter, and, finally, Henry Gellibrand, who, in 1626, succeeded Gunter as professor of astronomy at Gresham College. The only scientific work that Wells published was an excellent book on the construction of all sorts of dials, which was issued in 1635, shortly before Wells's death. In his preface Wells states:

> This tract of Dyalling was written for mine owne private delight and exercise, above thirteene yeeres since, as divers of my friends know: wherein I have beene the more curious, to handle every kind of Plane; not with any thought, or purpose, ever to print the same, but to keepe it by me, for satisfaction to my selfe, and friends whensoever there should be cause to use it. Yet shortly after the Worke was finished, occasion to make use of it, drew on occasion for my friends to take notice thereof: amongst the rest, my two late worthy friends, Master *Henry Briggs*, (iustly stiled by a Reverend Divine our *English Archimedes*) and Master *Edmund Gunter, Astronomie Lecturer of Gresham Colledge*, desired to peruse it; and finding that the Arithmeticall part was performed by Logarithmes of both kinds, and therefore might serve instead of uses for the Chiliads and Canon, compiled by them, did earnestly sollicite mee to print the same: but they both dying, this motion of theirs died with them.
>
> Of late it hath beene againe revived, by the request of other Friends; but especially by the encouragement of my much respected, and learned Friend Master *Henry Gellibrand*, who hath annexed his approbation of that, which in my owne opinion I never thought worthy of so much esteeme. I have therefore at length (yeelding to the importunitie of Friends) consented to let it passe to the publike view. If any benefit grow from it, let him have the honour, that is the Authour of all good gifts, and let my Friends share in the thankes, that have in a manner extorted it out of my hands.[35]

[35] *Sciographia* (London, 1635), sigs. ¶5^{v}–¶6^{v}.

It was in tracking down John Wells, the friend and collaborator of three successive Gresham College professors, that most of the evidence concerning the activities of the Gresham College circle during the quarter-century preceding 1645 was unearthed. It will therefore be profitable to trace Wells's career briefly. Though he does not appear in the *Dictionary of National Biography,* and there is no record of his having attended either university, he was a man of considerable importance in the seventeenth century. The information concerning his career that I have been able to collect comes from the Calendar of State Papers, the histories of the British Navy, the county histories of Kent, and the references to him in the works of Gresham professors. Whether or not he came from a family long connected with naval affairs I do not know. Certain it is that his wife, Catherine Wallinger, whom he married in 1610[36] belonged to the same family as Benjamin Gonson, Sr., who was Treasurer of the English Navy from 1549 to his death in 1577, when he was succeeded by Sir John Hawkins.[37] Our first record of Wells, however, consists in the grant, on May 10, 1606, to him and Antony Lewis, jointly, of the office of Keeper of the Naval Stores at Deptford Strand, Chatham, and Portsmouth for life.[38]

In 1615 a new grant of this office was issued, this time to John Wells alone.[39] As Keeper of His Majesties Stores at the Navy

[36] See the registers for St. Nicholas Parish, Deptford, in *Hasted's History of Kent, corrected and enlarged by Henry H. Drake,* Pt. I: The Hundred of Blackheath (London, 1886), p. 40.

[37] Anthony Wood, *Athenae Oxonienses,* ed. Philip Bliss (London, 1813–17), III, 1155, under "Benjamin Wells" (the son of John Wells), gives an account of Benjamin's father, "the famous mathematician of Deptford." Wood states that John Wells married Catherine Wallinger, daughter of Thomas Wallinger, Esq., by Benedicta Gonson, his wife. Benjamin Gonson, Sr.'s mother was named Benedicta, and one of his daughters, Catherine, married Sir John Hawkins. Catherine Wallinger's mother may have been a daughter of Benjamin Gonson, Jr., the brother of Lady Hawkins. Benjamin Gonson, Jr. was twenty-six when his father died in 1577 (*Hasted's History of Kent,* p. xix). Of his other sisters, Anne married Abraham Fleming, an important writer of scientific treatises in Elizabeth's reign, and Thomazine, after the death of her first husband, Captain Edward Fenton, married Christopher Browne of Sayes Court, Deptford, and was therefore the grandmother of the wife of John Evelyn. Evelyn, who was a member of the Royal Society group at the time of the Society's founding, was from 1652 on settled at Sayes Court.

[38] *State Papers, Domestic, James I,* Vol. XXI, No. 21 (May 10, 1606).

[39] *Ibid.,* Vol. LXXX, No. 5 (January 17, 1615).

Yard at Deptford, often called East Greenwich, Wells had the use there of a fine house with a spacious garden second in size and value only to the adjacent house reserved for his immediate superior, the Treasurer of the Navy.[40] Here at Deptford Wells's associates were the high naval officers, the mariners who constantly brought back from distant lands data that would be scientifically valuable to anyone who could elicit and make use of it, and finally the naval architects from the adjacent shipyards. Among these master shipwrights would be Phineas Pett, Edward Stevens, Hugh Lydiard, and Henry Goddard, the father of the Jonathan Goddard who was one of the group mentioned by Wallis as meeting at Gresham College in 1645. Nearby, also (after 1622, at least), would be John Clerke, who has already been mentioned in connection with Briggs and Bedwell, and was Keeper of the Armoury at Greenwich.[41]

Most important, however, was the association of Wells and his naval friends with Briggs, Gunter, and Gellibrand, in turn. The State Papers carry no record of his association with Briggs, so here we must rely upon Wells's own statements. But certainly through such a man as Briggs's friend, Edward Wright, who was the foremost authority of the day on navigation, the Gresham professors would quickly be made acquainted with the navy group.[42]

In Gunter's case, however, the State Papers give ample evidence of intimate association and collaboration with Wells and his shipwright friends. Gunter, Wells, Phineas Pett, Hugh Lydiard and Edward Stevens worked out together a more accurate method of calculating the tonnage of ships, and the State Papers for the years 1626 to 1628 are filled with records of their proofs of its

[40] There is a plan of Deptford made in 1623, to which additional remarks by John Evelyn have been joined, printed in *Hasted's History of Kent,* facing p. 18. It shows the Storekeeper's house and garden in the lower left (northwest) corner, next to the Treasurer's house. Sayes Court Manor House, then owned by Evelyn's father-in-law, and later the residence of Evelyn, was diagonally across the lane from the Storekeeper's house. After John Wells's death in 1636 his son, John Wells, Jr., who had taken his B.A. at St. Alban's Hall, Oxford, in 1632, succeeded him in the office, and apparently retained the post until 1663 (see *State Papers, Domestic, Charles II,* Vol. LXXXII, No. 100 [Oct., 1663]).

[41] *State Papers, Domestic, James I,* Vol. CXXXI, No. 10 (June 4, 1622).

[42] Edward Wright died in 1615, and Briggs moved to Oxford as Savilian professor in 1619, so that the association between Gresham College and the naval authorities at Deptford was established in the early years of the seventeenth century.

superiority and of the campaign to secure its adoption.[43]

After Gunter's death in December, 1626, an equal intimacy sprang up between Wells and Gunter's successor at Gresham College, Henry Gellibrand. Gellibrand's most notable contribution to science was the proof of the secular variation of the magnetic needle—the "variation of the variation." Gellibrand, with Wells and several others, made the observations which led to the discovery of the secular variation in the garden of Wells's house at Deptford. There they repeated the observations that Wells and Gunter had made in the same place twelve years earlier, in 1622. Finding a difference of more than two degrees between his and Gunter's determination of the variation, and a difference of seven degrees between his determination and that made by William Borough in 1580, Gellibrand demonstrated that the variation near London had been gradually decreasing. But let us turn to Gellibrand's own report of his experiment, published in his pamphlet *The Variation of the Magneticall Needle* in 1635:

> Thus hitherto (according to the Tenents of all our *Magneticall* Philosophers) we have supposed the variation of all particular places to continue one and the same: So that when a Seaman shall happly returne to a place where formerly he found the same variation, he may hence conclude, he is in the same former *Longitude*. For it is the Assertion of *Mr. Dr. Gilberts. Variatio vnicuiusq; Loci constans est*, that is to say, the same place doth alwayes retaine the same variation. Neither hath this Assertion (for ought I ever heard) been questioned by any man. But most diligent magneticall observations have plainely offred violence to the same, and proved the contrary, namely that the variation is accompanied with a variation. For whereas in the year 1580 *Mr. Burrows* (a man of unquestionable abilities in the *Mathematiques*) found the variation at *Limhouse* neere *London* to be 11 gr. 15 min. or neere one point of the Compasse; In the yeare 1622 *Mr. Gunter* sometimes professor of *Astronomie* in *Gresham Colledge*, found the variation in the same place to be but 6 gr. 13 min. And my selfe this present yeare 1634 with some friends had recourse to *Diepford* (where Mr. *Gunter* had heretofore made the same observations with those of *Limehouse*) and found it not much to exceed 4 degrees.[44]

Gunter's results had been printed in his *The Description and Use of the Crosse-Staffe* (1623).[45] Gellibrand, after giving in detail

[43] *State Papers, Domestic, Charles I;* see XXVII, 67; XXIX, 7 & 10; XXXVIII, 30; XXXIX, 63; LV, 39; LVII, 42, 43, & 45; LIX, 24 & 26; LXXXVIII, 63. See also M. Oppenheim, *A History of the Administration of the Royal Navy, 1509–1660* (London, 1896), pp. 266–67.

[44] Pp. 6–7.

[45] P. 66.

Gunter's experiment to determine variation in 1622, continued:

I deny not the Artifice to be very nice and subtle, and that an error may unawares easily insinuate it selfe, which together with this great discrepance, moved some of us to be overhasty in casting an aspersion of error on *Mr. Burrows* observations, (though since upon noe just grounds) till an acquaintance of ours [marginal note: *Mr. Iohn Marr*], lately applying *Mr. Gunter's* owne Needle to the side of the Cubicall Stone of his Majesties Diall in White Hall garden, could not finde the variation so great as 6 gr. 15 min: formerly found; whereupon resolving with some friends to make an experiment hereof, we went to Diepford the last yeare 1633 the day of the Sunnes entrance into the summer Solstice, to the very same place where Mr. Gunter heretofore had made observation, and found it much lesse then five degrees; And afterwards calling into Question the Insufficiency of our Instruments, that all scruple might be quite taken away, we had recourse this presente yeare 1634 Iun. 12, stilo vet: to the same Garden of our learned and ingenuous friend *Mr. John Welles*, with a Quadrant of six foote Radius for solar Altitudes, continually rectified with great care, and a Horizontall Quadrant of two foote Radius, for the determining of the *Magneticall* Azimuthes, exactly set to the Magneticall meridian, and in paralellisme to the Horizon; (otherwise great error might ensue) with two Needles of twelue inches in length, well touch't with good Magnetts; And for the better satisfaction, took with us also the very same Needle wherewith *Mr. Gunter* made the foresaid observations, in length ten Inches; all three most accurately respecting the same Magneticall Meridian as we then proved. And least there might arise some diversity in the variation through the touches of severall stones, I caused the one Needle first touch't by a very good Magnet, to be retouch't by another as good if not better, and the same wherewith most of our sea compasses are touch't, and yet found no difference betweene them.[46]

Gellibrand then proceeds to record and tabulate his data. In the margin, opposite his table of "Observations made at Diepford An. 1634 Iunij 12 before Noone," Gellibrand has: "*Testibus ab sociis* D[omin]is Wells, Harrison, Marr, Butler, Hopton, Hocknell."

Who were the other men in this group participating in this experiment? So far I have been able to discover very little about them. John Marr was a gentleman of Greenwich, who died in 1652 or shortly before, since his will was probated in that year.[47] He was a student of magnetism, for we find other contemporary refer-

[46] *The Variation of the Magneticall Needle*, p. 16.

[47] *Hasted's History of Kent*, p. 113.

ences to his expert knowledge of that subject. Captain Thomas James, in his book recounting his voyage in 1631 in search of the Northwest Passage, mentions, among the instruments taken on the voyage, Gunter's Crosse-Staffe, tables calculated according to directions given in Gunter's book *The Description and Use of the Crosse-Staffe* (1623), a log line divided according to the method of Snellius and approved by Gunter, and "four speciall *Needles,* (which my good friends Master *Allen* and Master *Marre* gave mee) of sixe inches diameter: and toucht curiously, with the best *Loadestone* in England."[48]

The Butler in the group was probably the Robert Butler who in 1633 published a mathematical work entitled *The Scale of Interest, or Proportional Tables.* Hopton I am unable to identify satisfactorily. There was a family of that name prominent in the navy in the sixteenth century, and also there was an able mathematical writer, Arthur Hopton, who died about 1614. Wells's friend may have been related to one of these. The other two names have so far eluded identification.

The noted sea-captain and explorer Thomas James, whom we have already mentioned, should be added to this group of Gellibrand's friends and collaborators. Before James left on his famous voyage seeking the Northwest Passage, Gellibrand arranged with him to take simultaneous observations of the eclipse of the moon on October 29, 1631, Gellibrand at Gresham College and James wherever he might be in the northern regions of the New World. Gellibrand added "An Appendix touching Longitude" to James's *Strange Voyage,* in which he compared the two sets of observations and from them calculated by a more exact mathematical method than would have otherwise been possible the precise longitude of James's position near Hudson's Bay.

The meetings and scientific investigations of Gellibrand and his associates at Gresham College and Deptford in the early 1630's contributed notably to the advancement of science. Could it be that Anthony Wood's statement[49] that Gellibrand "suffer'd conventicles (being himself a puritan) to be kept in his lodgings" at Gresham was based upon a report that confused these scientific gatherings with clandestine Puritan meetings? In view of the pre-

[48] Thomas James, *The Strange and Dangerous Voyage of Captaine Thomas James* (London, 1633), sigs. Q1^{r}–Q1^{v}.

[49] *Athenae Oxonienses,* ed. Bliss, II, 622.

ponderantly Puritan sympathies of the members of the succeeding Gresham College group of the next decade,[50] the supposition is at least plausible. An unostentatious assembly of a small group of men known to be of the Puritan party might well be suspected of having religion rather than scientific inquiry as its aim.[51]

Wells died in 1635,[52] and Gellibrand less than two years later.[53] The State Papers contain a document dated May 22, 1636, referring a petition of one Capt. Marmaduke Neilson to a commission composed of Sir James Galloway, John Selden, Henry Gellibrand and William Oughtred, "to consider and certify whether they hold the petitioner able to perform the particulars mentioned in his petition."[54] We have already observed the long standing association of Oughtred with the professors of Gresham College and their group. The commission with Oughtred is the last record we have of Gellibrand's activities.

Wells was succeeded as Storekeeper of the Navy at Deptford by his son, John Wells, who was then twenty-four years of age.[55] The younger Wells held this office throughout the Commonwealth period,[56] although for a time he was forced to share the post with John Davies and had great difficulty collecting his salary during the troubled years.[57]

[50] See the articles by Dorothy Stimson cited above, note 14.

[51] Joseph Foster, *Alumni Oxonienses, 1500–1714* (Oxford, 1891), II, 556, notes that Gellibrand's father, Henry Gellibrand of St. Paul's Cray, Kent, proceeded B.A. from Magdalen Hall, Oxford, in 1584 and later established himself as a physician in London. An Edward Gellibrand, probably the uncle of the mathematician, proceeded B.A. at Magdalen College, Oxford, in 1573, and later became the minister of the English Church at Middleburgh, Holland, where he died in 1601.

[52] See the petition of his son, dated December 14, 1635 for the grant of the patent for his late father's post, *State Papers, Domestic, Charles I,* Vol. CCCIV, No. 10. Drake, in *Hasted's History of Kent,* notes that Wells's will is to be found in P.C.C., 68 Pile, 1636. Anthony Wood is certainly in error in stating, *Athenae Oxonienses,* ed. Bliss, III, 1155, that Wells relinquished his office to his son and retired to Bembridge in Hampshire.

[53] Gellibrand died February 9, 1636/7. See Ward, *op. cit.,* p. 83.

[54] *State Papers, Domestic, Charles I,* Vol. CCXXI, No. 75.

[55] The younger John Wells was born December 1, 1611 (see *Hasted's History of Kent,* p. 39). His petition to succeed his father in his office as Storekeeper of the Navy was granted April 5, 1636 (*State Papers, Domestic, Charles I,* Vol. CCCXVIII, No. 24.

[56] See note 40 above.

[57] See *State Papers, Domestic, Charles I,* Vol. DVII, No. 86 (May 24, 1645); Vol. DXVIII, No. 8 (February 8, 1648).

Gellibrand's successor as Gresham Professor of Astronomy was Samuel Foster, in whose rooms Wallis first became acquainted with the group which he credits with being the "first begetters" of the Royal Society. One member of this group was young Jonathan Goddard, one year junior to Wallis. Born in 1617 at East Greenwich in Kent, the son of Henry Goddard, John Wells's associate and close neighbor, Jonathan Goddard, after completing his studies at Cambridge, returned to London in 1640 to take up the practice of medicine. It is not surprising to find him, five years later, meeting with a group at Gresham College. When, in 1660, the Royal Society was established, Goddard had for five years been Gresham Professor of Physic.[58]

Foster, in 1652, was succeeded by Lawrence Rooke, and it was in Rooke's, or Wren's rooms that the group was meeting in 1658 to 1660. But Rooke, also, was from Deptford, where he was born in 1622, the year in which Gunter and Wells took observations on the magnetic variation in Wells's garden. His biographer states that after receiving his M.A. at Cambridge in 1647, he retired to his estate in Kent, but in 1650 he went to Oxford and settled in Wadham College, for the sake of Dr. Wilkins, who was then warden.[59] But Wilkins did not go from London to Oxford until 1648, so that it is entirely possible that association with Wilkins in London, at the Gresham College gatherings, may have inspired Rooke to follow him to Oxford.

With this we bring to a close our narrative of the circle of scientific enthusiasts who gravitated about the successive Gresham professors during the half-century preceding the establishing of the Royal Society. In spite of the many obvious gaps in the evidence —gaps which research in English archives should some day remove

[58] An eminent mathematician and scientist of the day who may well have met with the group at Gresham College in the 30's and 40's, was Edmund Wingate, whom Samuel Foster appointed his literary and scientific executor, and who saw many of Foster's works through the press after the latter's death in 1652.

In the 20's Wingate had been in France, as English tutor to Henrietta Maria, and had been responsible for making his friend Gunter's work, especially his slide rule, as improved by Oughtred, known to the French mathematicians. He is mentioned as the friend of many who were definitely in the Gresham College circle, including Briggs, Gunter, and Oughtred. Since he died in 1656, he would not be one whom Wallis would remember as among those who became original members of the Royal Society.

[59] Ward, *op. cit.*, p. 90.

—the outlines of the story stand out in clear relief. They picture a steady growth, from the very beginning of the seventeenth century, of association and collaboration among English scientists under the sponsorship of the Gresham professors of geometry and astronomy, and a close liaison throughout this period between the Gresham circle and prominent officials, captains, and shipbuilders of the English navy. Without formal organization, but with the stability that only a secure and permanent foundation like that of Sir Thomas Gresham could supply, this circle, ever recruiting new members as the older ones passed on, entitles the Gresham College professors and their associates to the distinction of being named the true precursors of the Royal Society.

Stanford University

LOTZE'S INFLUENCE ON THE PRAGMATISM AND PRACTICAL PHILOSOPHY OF WILLIAM JAMES[1]

By Otto F. Kraushaar

The genius of William James lay not only in his unusual fertility and inventiveness, but also in a degree of open-mindedness rare among philosophers. Whether dealing with experience first-hand or as mediated by the psychologies and philosophies of other thinkers, he approached his material with a mind singularly unfettered and free from bias. While he himself possessed a remarkable talent for sensing the vitality and significance of immediate experience, he was none the less eager to examine and applaud ideas from any quarter, just so long as they held promise of illuminating and enriching the stream of living experience. But he invariably transformed everything he assimilated; and the vigor and pungency of his style and phrasing lent to many neglected and forgotten ideas a vitality and popularity such as they had not enjoyed before. By means of the energetic exercise of these talents James became a ferment in philosophical thinking the world over and completely reoriented philosophy in America.

When James appeared on the scene, American philosophy was still tied securely to the intellectual apron-strings of Europe. With the debatable exception of the literary philosophers of the Concord School, there was no truly indigenous American philosophy before 1890. The publication in that year of James's *Principles of Psychology* was the opening gun in the intellectual war of American philosophical independence. But like other revolutions, this one did not come off without being well scarred by the old order. From William James, the Socrates of the intellectual revolution, to John Dewey, its Aristotle, certain elements of the idealistic philosophies, dominant during the student days of James and Dewey, persist within the framework of their new thought.

But in the new setting the old ideas readily escape detection. The way in which the mind of James was fructified by the British

[1] This is the last in a series of four studies of Lotze's influence on William James. The first, "Lotze's Influence on the Psychology of William James," appeared in the *Psych. Rev.*, XLIII (1936), 235–257. The second, "What James's Philosophical Orientation Owed to Lotze," and third, "Lotze as a Factor in the Development of James's Radical Empiricism and Pluralism," were published in the *Phil. Rev.*; the former in XLVII (1938), 517–526; the latter in XLVIII (1939), 455–471.

empirical tradition from Hume through John Mill, and also by certain strands of French thought, notably present in Renouvier and Bergson, has received ample recognition.[2] The influence, however, of that phase of post-Hegelian German idealism represented by Rudolph Hermann Lotze (1817–1881) is far less familiar, though scarcely less important. The intellectual milieu in which James grew to maturity and from which he emancipated himself eventually was heavily charged with the idealism of the "German Movement." Most of the best minds in England and America, among them such figures as the two Cairds, T. H. Green, Bosanquet, Bradley, W. T. Harris and Josiah Royce, were under the spell of Hegel's absolute idealism. It had been introduced to the English-speaking world by J. H. Stirling[3] and others in the fifties and sixties of the last century, some twenty-five years after Hegel's death. In the meantime Hegelianism in Germany had splintered into schisms and run afoul of a strong current of scientific positivism and metaphysical materialism. Lotze was one of the few, in the Germany of that day, who, trained both in the German idealistic movement and in the methodology of the new natural sciences, sought to effect a fusion of these sharply diverging currents. It so happened that his works came to the attention of the English-speaking philosophical world just as Hegelianism was at full tide there.[4] He was promptly and enthusiastically received as the one on whom the mantle of Hegel had fallen, and was the more welcome to many because he freed idealism of many of the abstractions and rigid dogmas which Hegel had fixed upon it. Moreover, it was far easier and more satisfying to fish for philosophic truth in the clear, still waters of Lotze's style than in the turgid, muddy waters of Kant or Hegel. These circumstances account for the remarkable vogue

[2] The most comprehensive treatment of the many and varied sources upon which James drew is Professor R. B. Perry's monumental work, *The Thought and Character of William James,* 2 vols., Boston, 1935.

[3] J. H. Stirling's, *The Secret of Hegel,* published in 1865, though not the first to bring Hegelianism to England, was the most potent single factor in promoting its spread and enthusiastic acceptance there. See Rudolf Metz, *A Hundred Years of British Philosophy,* translation edited by J. H. Muirhead, London and New York, 1938, Pt. II, chs. 1, 2.

[4] Lotze's "System der Philosophie," comprising a separate *Logik* and *Metaphysik,* appeared in English translation, under the editorship of B. Bosanquet, in 1884. A year later the English translation of the *Mikrokosmus* appeared. It was long used as textbook in English and American universities.

of Lotze's teaching and writing, which lasted well into the first decade of the present century. During this period the thoughts of this unassuming sage of Göttingen were the rallying point for moderate idealists all over the western hemisphere.

James, like so many of his contemporaries, was swept into the orbit of Lotze's ideas also. And even long after he had denounced the "bloodless categories" and the creaking, thumping machinery of the all-engulfing Hegelian Absolute, he continued to find nourishment in Lotze's philosophy. For though Lotze was most acceptable to the post-Hegelians, his system was many-sided and reflected the remarkable versatility of its author. His philosophy is not unlike an intellectual bazaar; in essence it is a continuous dialectic which explores every relevant hypothesis, theory, or doctrine, and ends, not infrequently, in compromise. Because of these qualities, Lotze's philosophy left the stamp of its influence on diverse systems of thought.

There were, in fact, elements in Lotze's thought which could feed the fires of James's antipathy to absolute idealism of the Hegelian type. Lotze had tried, in the first place, to disentangle certain basic ideals of the German idealistic movement from Hegel's logic and speculative method; and secondly, he aimed to establish the validity of these ideals by appeal to the concrete facts of human experience, so far as possible. In the Absolute of Hegel and the post-Hegelians, the rich variety of immediate experience fuses into an eternal noon of pure being, at the expense of the multiplicity, uniqueness and value of the concrete, empirical world. In Lotze's eyes, Hegel's aims were sound to this extent: he looked for the One in the Many, the end among the means, the universal in the particulars. But the method by which he sought the solution was illegitimate. For he translated real relations into rational relations, things into concepts, living purposes into a reified Idea. For Lotze, however, things are not identical with thoughts, individuals are not simply "moments" in the inexorable development of the Absolute, and the Many are not simply grist for the One. His system is like an empiricist counterpoise to the excesses of Hegelian rationalism. Because of this fact, "tender-minded" idealists of various persuasions, as well as "tough-minded" realists of one sort or another, found Lotze's philosophy provocative and instructive. This was particularly true of William James who

also sought to reconcile moral idealism with a conception of knowledge and truth which accepted the Here and Now at its face value.

James's interest in psychology led him to begin the study of Lotze's works before Hegelianism had captured the attention of philosophers in England and America. This fact is significant. For James approached Lotze's thought in relative innocence, philosophically speaking, and looked upon it, not as a kind of attenuated Hegelian idealism, but as a promising new philosophy. The latter recommended itself to James especially because its author had undergone the same evolution of interests—from medicine through psychology to philosophy—which he was then himself undergoing. The ferment which the doctrines of Lotze provoked in his thinking came in two waves. The first extended through James's writings of the nineties, devoted largely to psychology, ethics and religion. By 1879 he had made an initial study of Lotze's basic works: *Medicinische Psychologie, Mikrokosmus, Logik,* and *Metaphysik.*[5] These books exerted a considerable and, for the most part, a positive influence in the formative stages of his thought. This is most evident in the *Principles of Psychology,* wherein James, after acknowledging his heavy indebtedness to Lotze,[6] invokes his support for a number of special theories, notably those of emotion, attention, and will.[7] Moreover, certain of Lotze's doctrines proved to be of consequence also in the framing of James's tentative metaphysics of this period. He drew support especially from Lotze's defense of indeterminism, his championing of the Many against the One and of persons against an impersonal macrocosm. While he never explicitly accepted Lotze's metaphysical view that reality consists of persons or free, person-like entities, it remained implicit in his thought; for he was temperamentally attracted to this idea. Furthermore, he attached great weight to Lotze's defense of the power of faith and of ideals; the significant rôle which Lotze attributed to these in the shaping of events found a ready

[5] See the first article listed in footnote 1, especially pp. 237–239, where evidence supporting these statements is given.

[6] ". . . I cannot resist the temptation at the end of my first literary venture to record my gratitude for the inspiration I have got from the writings of J. S. Mill, Lotze, Renouvier, Hodgson, and Wundt. . . ." (Preface, I, vii).

[7] In 1879, eleven years before the publication of his *Principles,* James wrote his friend G. Stanley Hall, ". . . it gratified and at the same time disgusted me to see how many choice pages of my everlasting psychology had been anticipated by Lotze." Quoted in R. B. Perry, *op. cit.,* II, 16.

echo in his thought. These elements were well suited to the native inclinations of James. But at the same time, he had to be on his guard against Lotze's tendency to conciliate and compromise. For in the end Lotze sought somehow to bring the Many into coincidence with the One; to consolidate the realm of persons within a personal, universal Absolute; and to identify free human initiative with the march of cosmic purpose. Then, too, Lotze had left a yawning dualism between "thoughts" and "things," which he had not succeeded in bridging to James's satisfaction. Yet in spite of these incongruent elements, the first wave of Lotze's influence is more significant in what it gave James positively than in the provocation it gave to seek a solution in other terms.

The second wave, rather less significant than the first, extended from the turn of the century to James's death in 1910. In the late nineties and again after the completion of his *Varieties of Religious Experience,* James re-examined several theses basic to Lotze's thought. But this time he broke completely with the traditional logic of idealism. True, he continued to speak with respect of that form of personalistic idealism known as pan-psychism, although he could not bring himself to embrace it openly. Gradually, as he becomes more confident of his philosophy of "pure experience," the references to Lotze become less frequent. Moreover, he now selected for special refutation certain of Lotze's favorite arguments, notably his attempt to establish metaphysical monism by proving it a necessary assumption to account for the observed fact of interaction.[8] Nevertheless, because of the amorphous character of Lotze's system it was possible for James to cling to separate doctrines while repudiating the rest. The rejection of basic theses of Lotze's metaphysics did not prevent James from seeking the support of his arguments and reputation for the special doctrines of pragmatism and in the field of ethics.

Pragmatism is a many-faceted doctrine, now commonly associated with James's name, which maintains that the meaning of ideas lies in their "working" or consequences. From this ambiguous mother-stem have branched many special forms of the doctrine, some of them methods, some of them theories of truth. In one form or another, pragmatism was an integral feature of James's thought from the outset. It was a natural corollary of his deference to immediate, concrete experience, the "show me" experi-

[8] *Pluralistic Universe* (1909), 55–62.

mentalist attitude which characterized his mental outlook. Though he did not give a systematic account of pragmatism until 1907, he admitted then that his essay, "On the Function of Cognition," published in 1885, was the "*fons et origo*" of the doctrine. Since pragmatism is entailed so definitely by the tenor of James's thought, it may well seem fruitless to search for "sources" elsewhere than in James himself. But though his practicalism was, so to speak, congenital and not acquired, the general form, bearings, and application of the doctrine owe a great deal to the philosophical literature of that day.

The rôle that Lotze's philosophy played in this connection has never been sifted out from the total complex of ideas which formed James's early philosophical milieu. While it is doubtless true that English and American philosophers, such as Locke, Hume, Mill and Peirce, as well as the general tradition of which their ideas were a part, furnished James the chief stimulus and support of pragmatism, it is no less true that certain elements in the German idealistic tradition from Kant to Lotze were also congenial to the doctrine. On this question we have James's own word. In enumerating the currents of thought which prepared the way for pragmatism, he gave first place to ". . . the philosophic criticisms like those of Mill, Lotze, and Sigwart, [which] have emphasized the incongruence of the forms of our thinking with the 'things' which the thinking nevertheless successfully handles."[9]

In Lotze's philosophy three separate doctrines, whose convergence he seeks to effect, contain distinctly pragmatic implications. The first of these may be said to be epistemological, the second is a doctrine of logic, the last is predominantly a question of ethics or moral philosophy.

The first of these is a simple and forthright doctrine, although like many other Lotzean ideas it is difficult to see how it can be squared with other elements of his system. Lotze's deference to concrete experience—the same motive which prompted his sharp attacks upon the austerity and abstractness of Hegel's logic—led him to pronounce again and again a general dictum to the effect that "things are what they are known as." In the *Medicinische Psychologie,* the soul, the self, the will, as well as lesser existents and processes are all interpreted in the light of this doctrine. The soul is simply the effects it can produce; the self is a unity if it can

[9] *Collected Essays and Reviews* (1920), 448–449.

appear, act and impress as such; the will is free and undetermined if it can effectually act as free. Similarly, in the *Mikrokosmus* and the *Metaphysik* he treats substance in an identical way. To be a substance means nothing more than to be experienced, felt, acted on as such. In short, things are not to be evaluated and judged in terms of some abstract definition of reality, but in terms of the effects they can produce in the actual world and on the living consciousness. To be sure, Lotze's predilection for teleological idealism throws an unexpected light over this seemingly radical empiricism; for to his eyes Nature stood revealed in her effects as an organic whole, determined by purposes and values. James accepted Lotze's general dictum or principle that things are what they are known as, but he knew them as something different from Lotze's description of them. Either Lotze was reading something in, or James was blind to some of the evidence. We shall see below, however, that James employed Lotze's principle in more than one connection.

A second doctrine of Lotze's, also rich with implications of pragmatism, arose out of the difference between the logical structure of thought and the actual or "real" structure of those things which are said to be known or understood by thought. Lotze begins, in characteristic fashion, by developing this difference into a sharp dialectical antithesis. He reasoned as follows: "Thought" (*das Denken*), with its formal and necessary principles and laws, introduces among "things" a good deal of conceptual apparatus to which nothing real in things corresponds. Thought may make many and various skirmishes in pursuit of the same truth, just as several trails may lead to the same mountain-top. Yet it is evident that thought does somehow conduct us to some truth about things and enables us to identify and handle them. He compared the structural apparatus of thought to a scaffolding, the product of thought to the completed edifice. Thus the process of thinking has instrumental value only.[10] To think consistently about a thing is not to copy that thing or to follow minutely its structure and articulation. Nevertheless, if the process of thought is to have any value, it must lead to a fruitful conception, with the help of which things can be ordered, understood and manipulated.

Lotze found great difficulty in squaring this sharp dualism of

[10] See especially *Logic*, Introduction, § ix; *Microcosmus*, trans. by Hamilton and Jones, Bk. VIII, ch. 1, §§ 4–8.

thing and thought with his metaphysical doctrine according to which there is a real world made up, not of concepts, but of monads organically related. He wished to show that while thought is not constitutive of reality, the product of thought (*Denkleistung*) has "real validity" (*sachliche Geltung*) nevertheless. He seeks an answer to the question, "Can the product of thought, constructed in obedience to the laws not of reality but of logic, be true of reality?" This problem occasions an exhaustive and tortuous examination, in Lotze's *Logik,* of the forms of judgment, the upshot of which is the broad conclusion that the logical laws and principles, which effect the syntheses and order of ideas in judgment, are at bottom not logical at all, but aesthetic and moral instead. In other words, the demand for logical consistency in thinking is not a bare logical demand, but arises from certain insistent aesthetic and moral demands. "The real validity of our cognition consists in the fact that it is not a meaningless show of appearances, but sets before us, instead, a world whose coherence is determined in accordance with the injunctions of the sole reality in the world, namely, the Good. In this our cognition possesses more of truth than if it copied an intrinsically valueless world of objects."[11] In this way Lotze essays the validation of knowledge of Nature by reference to the same moral and aesthetic values which constitute the ultimate ground of Nature herself.

Closely related is a third point in Lotze's philosophy which contains another germ of pragmatic doctrine. We have just seen how Lotze sought to overcome the dualism of things and thoughts by pressing to the limits of logic, thus exposing the ground on which logically valid thought, real being, and moral values can meet. This ground Lotze calls "the Good." He conceives it as the formative energy in thing and in thought, which is directly experienced in "practical" intuitions, that is, in the realization and enjoyment of values. This doctrine is nothing other than a defence of "the primacy of the practical (that is, moral or axiological) reason." Under the same designation, Kant had maintained that the "pure rational will" can rightfully postulate certain "practical" principles, such as freedom, which theoretical or scientific reason cannot "know" or prove. Lotze goes even further than Kant in the defense of practical reason; for he claims priority not only for formal principles but for values as well.

[11] *Grundzüge der Metaphysik* (1883), 92.

To these he attached both epistemological and metaphysical import. The perception of values, he claimed, not only reveals human good, but contains an insight into the nature of reality.

Consistently with this position, Lotze framed a new conception of the nature of reason. "Intellectual life," he holds, is much more than "thought." "After thought has done its work, we have yet to give ear to the pronouncements that the whole mind makes by virtue of its aesthetic and ethical criteria; . . . the whole mind rejects not only what is contradictory, that is, the unthinkable, but also the *absurd,* that is, whatever may be thought without logical contradiction, but cannot satisfy our aesthetic and moral presuppositions."[12] Our comprehension of reality comes not only from pure ratiocination obedient to the rigorous laws of logic; it has its source also in those broader and, to Lotze, more fundamental perceptions of value and purpose. Bare rational cognition is, in his phrase, "*cognitio circa rem*"; while reason appreciative of worth ("*wertempfindende Vernunft*") he calls "*cognitio rei.*"[13] Moral imperatives, aesthetic intuitions and religious convictions should not be dismissed as capricious and irrelevant subjective attitudes; they are genuine insights into a reality which is intrinsically a process of purposes and values. Meaning (in the sense of the reason "why") is primary to fact (the "how"). "Being" is a process of value.

In the defense and elaboration of this position a pervasive non-rational strain comes to light in Lotze's philosophy. He is not, however, to be classed with those shallow sentimentalists who proclaim feeling and will to be the true criteria of truth only to mask the natural indolence of the intellect. The non-rational insights in Lotze's system had always to square accounts with a stubbornly rational dialectic. Thus, for example, in his *Logik* he undertakes a labyrinthine and exhaustive analysis of the forms of logical judgment; and only after eliminating every other possible interpretation of the logical synthesis effected in judgment is he willing to grant primacy to ethical and aesthetic criteria.

These, in meager sketch, are elements of Lotze's teleological

[12] *Kleine Schriften* (1885–1891), III, 63. See also I, 272, and III, 305–312. Similar statements are to be found also in the *Logic,* while the *Mikrokosmus* abounds in them.

[13] *Kleine Schriften,* III, 305–312; see also *Mikrokosmus,* Bk. II, ch. 5; Bk. IX, ch. 1.

idealism which occupied James's mind while it was incubating the doctrine of pragmatism. He sifted Lotze's arguments with care. From first to last he was predisposed to follow Lotze into both non-rationalism and the assertion of the primacy of practical reason—but with important differences. Lotze, by temperament and tradition a speculative metaphysician, looked to non-rational postulates for the validation and extension of our rational knowledge of reality. James, on the other hand, was more concerned about the way in which rational and non-rational elements are interlarded in the experience of the conscious subject and in "the sentiment of rationality." While he could not follow Lotze into the devious paths of teleological monism, neither could he wholly reject this course. In the *Principles* he maintained, tentatively, a teleological conception of Nature, and asserted it to be more satisfactory than out-and-out metaphysical materialism. "That theory," he urges, "will be most generally believed which, besides offering us objects able to account satisfactorily for our sensible experience, also offers those which are most interesting, those which appeal most urgently to our aesthetic, emotional, and active needs."[14] This psychological reformulation of Lotze's doctrine of the primacy of the "practical," discloses a significant root of James's pragmatism. In the numerous intimations of pragmatism contained in James's writings up to 1900, the moral and aesthetic motivation of the doctrine clearly predominates. The results of thought are to be interpreted in the light of the ends and purposes which direct and motivate thought. Ideas are true if they lead to better adjustment. The quest of reason is dedicated, in the last analysis, to making man feel more at home in the world—biologically, psychologically, spiritually. That James recognized his kinship with Lotze in this phase of his pragmatism is indubitable. In the margins of passages in which Lotze had asserted the "primacy of the practical," James wrote, in his copies of Lotze's works, "pragmatism," or sometimes "practicalism."[15]

Although James never abandoned the "practical" motive of his pragmatism, in the period after 1900, when he was excogitating the

[14] *Principles,* II, 312. Also *ibid.,* 317; I, 401; also, "Rationality, Activity, Faith," *Princeton Rev.,* II (1882), 59; *Will to Believe* (1897), 75–76.

[15] Through the courtesy of Professor R. B. Perry, Mr. Henry James, and the officials of Widener Library, Harvard University, the author has had access to the unpublished letters, literary remains, and the library of William James.

philosophy of "pure experience," he concentrated his attention on the theoretical, logical, and scientific aspects of pragmatism. He now gave certain aspects of Lotze's dualism of "thing" and "thought" special attention, largely because he was intent on avoiding this dualism which he had tentatively adopted in the *Principles of Psychology*.[16] Once James had arrived at his new interpretation of consciousness, it was not difficult to bridge this dualism, so far as percepts are concerned. But what of concepts? Lotze, it will be remembered, had stressed the instrumental instead of the representative function of thought; concepts, he maintained, are not copies of things, but a kind of intellectual shorthand for arriving at some needful adjustment. James frequently invoked the support of this reasoning, and in the later polemical development of his doctrine gradually placed more and more emphasis on the functional character of concepts. But having gone so far with Lotze, James saw that his path was beset with difficulties. For Lotze's functional interpretation of concepts entailed the presupposition of a dualism which to James's way of thinking violated the observable continuity of nature and experience.

Lotze, too, had grappled with this problem and propounded two solutions, both of which, in James's eyes, served to reënforce the functional interpretation of "thought." The earlier of these is to be found in Lotze's little *Metaphysik* of 1841. He posed the question in the following terms: If "thought" is not identical or coincident with reality, just what is the ontological status of thought? James defines Lotze's answer approvingly in his *Pragmatism*: "May not our descriptions, Lotze asks, be themselves important additions to reality? And may not previous reality itself be there, far less for the purpose of reappearing unaltered in our knowledge, than for the very purpose of stimulating our minds to such additions as shall enhance the universe's total value? 'Die Erhöhung des vorgefundenen Daseins' is a phrase used by Prof. Eucken somewhere, which reminds one of this suggestion by the great Lotze."[17] On this view, "thought" is conceived as a later and higher development of reality, literally created in the act of thinking.

While this reasoning suited the radically futuristic aspect of James's pragmatism, Lotze, seeking a final conception of reality,

[16] See the third article listed in footnote 1, especially pp. 459–465.

[17] *Pragmatism* (1907), 256. See also *Meaning of Truth* (1909), 80.

advanced dialectically to a second position, expounded in the *Logik* of his final "System." He was one of those, James once remarked regretfully, who "spoil" their "sincere empirical evolutionism . . . by the arbitrary way in which they clap on to it an absolute monism with which it has nothing to do."[18] Be this as it may, Lotze developed a new and highly influential interpretation of the kind of being which may be attributed to "thought." The being of "things" is denoted by the word "existence"; the being of "thought," however, is described as *Geltung* or "validity." The principles of logic, the forms of thought and concepts are essences or subsistents, whose reality consists not in existing but simply in "being valid."[19] The revival of Platonic realism in recent German philosophy rests in large measure on this doctrine.

James appropriated even this last stage in the development of Lotze's doctrine of thought. But the use he made of it leads one to suspect that he confused it with Lotze's far more casual notion that "things are what they are known as"; for he attributed to Lotze's *Geltung* pragmatic implications of which it was quite innocent. He asserted, for example: "For a thing to be valid, says Lotze, is the same as to make itself valid"; and he uses this statement in corroboration of the need for pragmatic verification of ideas.[20] But on Lotze's views, the synthetic bonds established in thought are valid not because of cumulative verification by experience, but by reason of the inherent self-evidence of the principles upon which the whole structure of knowledge rests. Lotze is aligned at this point with the intuitionists, not with the pragmatists. The pragmatic moment in Lotze's philosophy appears only when the question of the application or correspondence of the conceptual order to Nature is at issue.

In the light of the significant congruences in the doctrines of James and Lotze, it is not surprising that James availed himself of Lotze's pragmatic attacks upon a number of metaphysical problems, to which reference was made above. Always shrewd and circumspect, Lotze was inclined to disparage *a priori* arguments for the necessary existence of pure, inscrutable, noumenal being. Realities or processes such as substance, self, or activity, he reiterated, are nothing more than can be accounted for in the experience

[18] *Collected Essays and Reviews,* 444.

[19] See especially *Logik,* §§ 317–321, 339–341.

[20] *Essays in Radical Empiricism* (1912), 75. See also p. 167.

of them. Things are what they are worth; their natures are made manifest by the way in which they make themselves felt and effective. "Substance," he explained, "signifies everything which possesses the power of producing and experiencing effects, in so far as it possesses that power."[21] In other connections he applied the same reasoning to the definitions of the self and of activity.

Echoes of these pragmatic definitions resound all through the writings of James. "Is it not time," he inquired, "to repeat what Lotze said of substances, that to *act like* one is to *be one*?"[22] And again, "So long as our self, on the whole, makes itself good and practically maintains itself as a closed individual, why, as Lotze says, is not that enough?"[23] Similarly, respecting the problem of activity: "Lotze says somewhere that to be an entity all that is necessary is to *gelten* as an entity, to operate, or to be felt, experienced, recognized, or in any way realized, as such. In our activity-experiences the activity assuredly fulfills Lotze's demand."[24] With the help of these arguments James aimed to show that entities or powers must be defined in terms of their capability to perform the phenomena they are evoked to explain.

In sum, these instances of Lotze's influence on James show how deeply his ideas penetrated and how stoutly they fortified important aspects of James's pragmatism. But it is easy to conclude too much. Though James employs Lotze's arguments, he usually goes beyond him to a more decisive and radical position. In Lotze's conciliatory system, pragmatism, empiricism, dualism, pluralism and related positions, are significant "moments" or constituent factors of one all-inclusive organic whole of reality. Lotze's severance from the old rationalism was at best partial only. He scrutinized experience in the hope of finding within Nature the essential threads wherewith the mind would be led to the absolute whole which his idealistic predecessors had envisaged. All the original elements in Lotze—the ones that attracted James—arose from his conviction that the only Absolute worth knowing is one which is in

[21] *Metaphysic,* trans. by Bosanquet and others (1884), § 243.

[22] *Meaning of Truth,* 108; repeated in *Radical Empiricism,* 59.

[23] *Principles,* I, 350. James's account of the self and the unity of consciousness in this work is heavily indebted to Lotze. Compare, *e.g., Medicinische Psychologie,* paragraphs 418 and 422, with *Principles of Psychology,* I, pp. 292 and 330 *ff.* See also Lotze's *Microcosmus,* I, pp. 157 and 249; and *Metaphysic,* §§ 242–244.

[24] *Radical Empiricism,* 167. Compare with Lotze's *Microcosmus,* II, p. 636. In the margin of this passage James wrote in his copy, "Pragmatism."

the process of realizing values; and the only Absolute worth living in is one which real men and women help to make in their day-to-day activity. Whenever the logic of actual experience failed to measure up to Lotze's expectations, he fell back on practical assurances which guaranteed the ultimate unity of phenomena. James asked less of experience than Lotze. He tried to think and live with the "neutrals, indifferents, and undecideds" of experience, unresolved and at loose ends. When he speculated on a possible principle of unity, he looked for it where Lotze did—in practical reason. But in the end James could find no warrant for asserting the actuality of this unity. Unlike Lotze, he rested his case with piece-meal, pragmatic syntheses of experience, guided only by the evidence at hand and by the changing urgencies of life and thought.

Since James always acknowledged the supreme urgency of "practical" or moral claims, the center of gravity of his ideas lay quite naturally in ethics and religion. But the sincere employment of the pragmatic method, coupled with his allegiance to the pluralistic outlook, prevented James from treating either moral or religious philosophy in systematic fashion. His conclusions in these fields do not constitute an explicit doctrine but a point of view; one which does, however, entail a definite metaphysics of human nature and destiny.

The central problems of James's moral philosophy arose from his desire to combine moral idealism, which consorted traditionally with absolute monism, and empiricism, which has definite pluralistic implications. Empiricism is "tough-minded" in James's own classification; it is not naturally "on the side of the angels," where James really preferred to be. The "tender-minded" absolute idealists, on the other hand, enjoyed ready access to the realm of values, but over a route that James considered illegitimate. Lotze was confronted with a similar dilemma. This fact, coupled with the remarkable concurrences in the psychological doctrines of the two, made it possible for Lotze to furnish James in this field also with provocative ideas and supporting arguments.

A central feature of James's moral philosophy is the stout defense of absolute contingency. The principle of indeterminism is consistent with both the "strung-along universe" and the activism and meliorism of his psychology and ethics. But while he defended the prevalence of chance in the universe as a whole, he, like Lotze, insisted upon explanation of particular events in mechanistic terms

wherever possible. Lotze, for his part, had impressed the concepts of psychical and psycho-physical mechanism upon modern psychology.[25] James, in his more radical way, urged psychologists to proceed on the working hypothesis "that mental action may be uniformly and absolutely a function of brain action."[26] But the moral idealism which was native to James and Lotze alike, caused them to reinterpret mechanism in such a way as to make it perfectly consistent with a teleological interpretation of reality.[27] Furthermore, they both excluded volition and associated mental phenomena from the mechanical realm. "Conditioned in all else," declared Lotze, ". . . we will be free at least in willing and acting."[28] And James likewise credited the effects of "interested attention and volition" to the "non-mechanical spiritual realm."[29]

The manner in which Lotze and James explain how it is possible for purposes to be efficacious in a mechanically conditioned cosmos is markedly similar. Lotze rested his case for the teleological interpretation of mechanism on the hypothesis that new monads from a noumenal realm may, from time to time, be interpolated into the mechanical realm. Once there, they are subject to the mechanical laws which condition all processes, physical as well as mental. All action, says Lotze, is the *reaction* of the entities entering into a given situation. A given event cannot, therefore, be explained solely by the presence of such and such laws; the number, position and character of the entities entering into the reactive relationship must also be taken into account. In other words, outside the realm of mechanism proper lies the realm of infinite possibility, which may be realized only in so far as it is possible to initiate new causal series in the mechanical realm. This possibility is all Lotze and James needed, the former to account for relevance of cosmic purpose to the actual course of events, the latter to account for

[25] See the first article listed in footnote 1, especially pp. 240–244.

[26] *Psychology: Briefer Course* (1892), Introduction.

[27] The reconciliation of mechanism and teleology is one of the basic motives of Lotze's philosophy. James wrestled with the same problem no less earnestly. He writes: ". . . A thoroughgoing interpretation of the world in terms of mechanical sequence is compatible with its being interpreted teleologically. Teleology presupposes, in fact, mechanical sequence." ["Rationality, Activity, Faith," *Princeton Rev.*, II (1882), 59.] This is repeated with slight verbal changes in *Will to Believe*, 76. James's way of posing and answering the problem is identical with Lotze's.

[28] *Microcosmus*, I, 254. See also *ibid.*, 144–150.

[29] *Principles of Psychology*, I, 594; also 454.

"chance" as well as for the power of ideals in human conduct. The degree to which they saw eye to eye on the practical aspects of the question has already been remarked upon by James's friend and Lotze's student, Carl Stumpf.[30] But in the metaphysical elaboration of the idea of contingency, Lotze's dialectic carries him to a position which James, committed to radical empiricism, cannot accept. Lotze, unwilling to leave to pure chance the noumenal intrusions into the phenomenal realm, explained them finally as the *Wirkungsweise* of God's creative intelligence. James, however, simply pointed to the brute fact of contingency. His decisive indeterminism is entirely independent of the logic of a system, while Lotze's position hinges on the acceptance of speculative dogmas common to metaphysical idealism.

The study of Lotze's works also sustained James's innate moral and political individualism. Lotze envisaged the real world as a society of personal spirits, constituting an all-embracing but personal world-spirit. Yet the component microcosms maintain their identity and personality unimpaired. Each self is a unity, not of substance, but of consciousness and action; for, Lotze avers, "the soul is a unity if it can appear to itself as such, or if it can appear to itself at all." Individual souls are the real centers of all action, enjoyment, aspiration and realization. "There is no superior region of a so-called objective spirit the forms and articulation of which are in their mere existence more worthy than the subjective soul."[31] Moreover, "there is no real subject, no substance, no place in which anything worthy or sacred can be realized except the individual Ego, the personal soul. . . ."[32] Just so for James also the concrete, personal being is the true and only locus of the experience of values. "The facts and worths of life," he declared, "need many cognizers to take them in. There is no point of view absolutely public or universal. . . ."[33] James paid his respects often to the personalistic elements in Bowne, Lotze's most devoted American disciple. And with justice he credits Lotze,

[30] "Seit dieser Zeit lehrt James mit aller Entschiedenheit Willensfreiheit im absoluten Sinne des Wortes, als ursachlose Entscheidung, als unbedingter Anfang einer neuen Kausalkette, ganz so, wie Lotze sie faszte." *William James, nach seinen Briefen* (1928), 31.

[31] *Microcosmus,* II, 540. In his copy of this work, James wrote in the margin of this passage "NB NB," ("note well" or "take notice").

[32] *Ibid.,* 539–540.

[33] *Talks to Teachers* (1899), p. v.

along with Renouvier and Sigwart, with having paved the way for a "re-anthropomorphized universe"[34]—a universe, that is, in which human individuals are important, not as the pawns of an absolute spirit, but in their own right.

The kinship of the moral philosophies of Lotze and James extends also to their philosophies of history. In accounting for the dynamics of history, Lotze championed the rôle of living, active individuals. "All which happens in history," he explains, "is only brought to pass by the thoughts, feelings, passions, and efforts of individuals, and . . . the ends towards which all these powers with their living activities are striving, do not by any means necessarily coincide with those towards which the development of the universal Idea tends."[35] History is not simply a process of natural evolution, nor can it be reduced to an inexorable phenomenology of the absolute Idea. James, too, in his own way, sought to expose the inadequacies of the evolutionary interpretation of history and its accompanying disregard of individual differences and endeavors. If James needed any corroboration of the philosophical respectability of his inherent individualism, Lotze, among others, was there to furnish this. His influence heightened James's confidence in the conviction that the motive power of history lies in "accumulated influences of individuals, of their examples, their initiatives, and their decisions."[36]

Finally, there are two aspects of James's philosophy of religion, if one may call his unsystematic reflections on this subject by that name, in which he is not averse to invoking the support of Lotze. The first of these is his attempt to formulate a conception of God. James, to be sure, was much more vitally interested in establishing and defending the legitimacy of belief, than with framing definitions or enunciating dogmas about the objects of belief. But he was always sympathetic and receptive to the testimony of sincere or orthodox believers. Like many contemporaries, he sought light on religious questions in Lotze's *Microcosmus* and *Philosophy of Religion*. In the latter volume, widely influential in its day, Lotze

[34] Review of *Personal Idealism*, *Mind*, n.s. XII (1903), 94.

[35] *Microcosmus*, II, 155. In the margin of this passage James wrote, "Lotze's own view—remember." A similar comment is to be found alongside a passage (*ibid.*, p. 165) in which Lotze asserts a similar point.

[36] "Great Men and Their Environment," in *Will to Believe*, 218. See also, "The Importance of Individuals," *ibid.*, 255–262.

conceived God as the convergence of fact, law and value, a personal being who is at one and the same time the source of existence, of order and of aspiration. The relationship of man to God is that of a personal microcosm to the personal macrocosm. The human experience of God is the consciousness of the universal counterpart of our own struggles for perfection and righteousness. James found this humanized and practical conception of God admirably suited to his pragmatic interpretation of religious verities. In some unpublished notes entitled "The Progress of Philosophy,"[37] James speaks of God as "the not ourselves which makes for righteousness, and which helps us when we make appeal." And he adds, "This is the practical and verifiable view of God, like Lotze."

There are echoes, also, of Lotze's doctrine in James's reflections on immortality. ". . . What Lotze says of immortality is about all that human wisdom can say," he declared, and quotes Lotze to the effect that only created things whose existence is an indispensable part of the world's meaning will endure eternally.[38] Later, in the Ingersoll Lectures of 1897–1898, James based his argument for immortality on the thesis that the brain is an organ of restriction, not of production, of mental and spiritual life. This thought, too, James had encountered in his study of Lotze's philosophy. In a marginal note in the *Microcosmus*[39] James acknowledged Lotze's clear anticipation of this idea. Other references to Lotze's conception of immortality occur, but they are as inconclusive as James's own gropings about this baffling problem.

One curious fact may be noted in closing this section. Lotze sought the absolute teleological unity of phenomena in order to reconcile the conflicting interests of different spheres of experience, of which the strife between the materialistic implications of natural science and the idealistic insistence on the reality of higher "spiritual" values provided the most crucial issue in Lotze's day. James, however, resisted the inclination to absorb the Many in the One, both because he saw no warrant in the facts and because it would disparage the moral energy, independence and dignity of man.

[37] Probably written between 1901 and 1903.

[38] *Principles*, I, 349. Lotze wrote (*Microcosmus*, I, 389), "That will last forever which on account of its excellence and its spirit must be an abiding part of the order of the universe; what lacks that preserving worth will perish."

[39] I, 642. Lotze treats of this subject in Bk. III, ch. 1, and in several connections in *Medicinische Psychologie*.

The pathways of Lotze and James crossed when Lotze prepared to draw the fangs of Hegel's all-devouring Absolute by giving renewed emphasis to pluralism and personalism, and when James searched immediate experience for the final assurance of "the not ourselves which makes for righteousness."

The reader may perhaps condone some general observations. To the present generation of philosophers, obedient to the current intellectual gods of scientific positivism, naturalism and "realism," even the degree of rationalization which Lotze undertook is extreme and untenable. We are inclined to look upon Lotze as someone who has been "overcome," and who may therefore be neglected with impunity. How could James, radical and realist that he was, have taken him so seriously? A scrutiny of the history of ideas is the best antidote for that provincialism in time to which everyone, philosophers not excepted, is prone. James, let us not forget, knew Lotze as one of the ablest teachers and writers of his day, who first had to be in part assimilated, in part overcome, if the revolt against metaphysical idealism was to be anything more than a shallow repudiation of the past. But the systems with reference to which revolutionaries define a new position are regarded with supercilious contempt by the children of the revolt. This is the irony of history, in the face of which Lotze has suffered an unjust neglect in recent decades.

Lotze is again worthy of attention today because through his influence on James he was instrumental in shaping the liberal tradition in America on its intellectual side. The influence of such German philosophers as Fichte and Hegel tended largely to confirm and enhance many conservative tendencies in American social and political thought. On the other hand, the influence in America of figures like Schopenhauer and Nietzsche, whatever their true intentions may have been, has been on the whole inimical to the liberal conception of life. Since the occasion and the temptation to paint a black picture of German philosophical influence is again upon us, it is well to reflect on Lotze's influence, which was steadily and forcibly on the side of liberal humanitarian ideals.

American philosophy in James's day was a strange medley of hard-headed empiricism and lofty moral idealism. Even politics reflected this condition; it turned from dollar diplomacy to humanitarian idealism and back again, to the complete bewilderment of those unfamiliar with our intellectual history. In James the em-

piricistic and idealistic strains converge. On the one side he bore uncompromising allegiance to fact, on the other he affirmed values to the point of mysticism. Lotze's influence on James was not typical of the influence of German idealism on British and American thought. His absolutism was more in the nature of a tendency than a dogmatic idea. Like James he was skilled in observation of fact, deft in psychological introspection—a literary psychologist in the best sense of the word. To the degree in which Lotze supported James's disposition to defend the Many against the One, the free against the determined, the process against the substance, his influence as a German philosopher was unique.

But the tradition in which Lotze stood would not let him stop short of fitting the materials of experience into some framework which would endow them with meaning and significance beyond the ephemeral moment. James shared this inclination, but lacked the tradition. At the same time, his immersion in the immediate was so profound that he could not be content with any single frame of interpretation, imported or otherwise. There remained for him the difficult task of supporting the spirit with "piece-meal supernaturalism," according as the spiritual need became vivid and insistent and demanded at least a tentative synthesis. Here he was moving boldly on ground that was strictly his own, hitherto unexplored by Lotze or any other philosopher.

Smith College

ISOLATIONISM: A CASE-HISTORY

By Frederick H. Cramer

Does history in any significant sense tend to "repeat itself?" Are there recurrent patterns of events, in which the mental reactions of human groups—that is, of the several types of minds composing such groups—to similar practical situations are essentially the same, in spite of obvious dissimilarities of surface circumstance and incidental details? No question can be of more concern than this to any student of the history of human ideas and behavior who hopes to find any "teaching" in history, any clues out of the past serviceable for guidance in the present; for unless there are such instances of repetition of similar sequences of phenomena, history can hardly be supposed to "teach" anything. The present case-study is a contribution towards an answer to this question. Since it would appear that essential similarities are often concealed —sometimes even to the erudite—by differences of period, locale, and persons, and diversities of nomenclature, the case is presented without explicit specification of the countries, the era, and the individuals concerned, the identification of all of these being relegated to the notes collected at the end.[1] Though the case is a particular one, and the known historical facts are, the author believes, faithfully reported, it is suggested that, when thus divested of differences of names and conventional terminology, it appears as generically—and in part even minutely—identical with other historic situations and with the behavior of other men of other times therein. The identification of these parallel cases—in particular, of the most recent—is left to the discernment of the reader. It can only be hoped that the outcome will not be merely a new confirmation of Hegel's melancholy observation that history proves at least one thing—man's unwillingness to learn anything from it.

I. THE SETTING.

1) *Geography:* A democratic republic, A . . . , flanked by the open sea. Adjacent states are not of menacing strength. The climate is favorable, the soil not too bad and full of valuable ore-deposits. Trade and industry thrive.

2) *Social conditions:* Once upon a time kings had ruled the country; then the land-owning aristocracy had ruled oligarchically. It had strengthened its ranks from the rising urban upper class. At last, however, the

middle class had gained control and established a democratic government, consisting of a legislature, an executive and a judiciary. Trial by jury was the standard procedure. Immigrants were welcomed. The state supervised a great deal of private as well as public life and directly controlled industrial production to a considerable extent.[2] On the whole, A... was governed by its citizens by genuinely democratic processes.[3]

3) *Historical background:* Far away from the shores of the great A...n democracy, on the fringe of western civilization, another country, M...,[4] had retained its semi-feudal character long after most other states had outgrown and discarded it. In M... one-man rule continued to prevail, although it had been tempered by the methods usually employed in feudal resistance to centralized government: quiet sabotage, armed risings, and regicide. At last, however, a certain Mr. X.[5] acceded to the throne.[6] He overcame internal opposition and succeeded within ten years after his accession in reducing all but one of his neighbor-states to helpless submission by quiet pressure no less than by outright conquest. The lone survivor at the time our case-history begins was the democratic state of O...,[7] head of a federation of smaller states. But even at O... Mr. X.'s strenuous efforts to form a fifth-column out of the political malcontents were beginning to bear fruit.

4) *Dramatis personae:*

Mr. D., an interventionist A...n patriot.[8]

Mr. A., an isolationist A...n patriot.[9]

Mr. X., dictatorial ruler of M..., commander-in-chief of its armed forces. A man bent on conquest and "leadership."

Chorus: the voters in the assembly of the A...n democracy.

II. PROLOGUE.

For a considerable time the A...n republic had pursued an imperialistic, *i.e.*, an aggressive foreign policy which had embroiled her in numerous wars, none of which were fought on her own soil. Her naval power was greater than that of any conceivable coalition which might be formed against her. Her land-force, formerly recruited by conscription, had in recent decades begun to rely more and more on the use of hired recruits. Lately her military and political enterprises overseas had not been going well, though no major set-back had been suffered.[10] But the economic and financial repercussions of war under these circumstances gave rise to a ground-swell of anti-interventionist sentiment, especially among the better-to-do upper class. Why should one continue to participate in foreign wars, why spend time, effort, and money on them, while no conceivable danger of invasion existed

at home? No one perceived at the time the possibility of a M . . . n menace. Had not M . . . always been a backward, semi-barbarous country, absorbed in internal squabbles, civil wars, and—at the worst—border-fights with her neighbors, far-away from A . . . ?[11] It is hardly surprising that the isolationist faction came to exercise a dominating influence on a war-weary A . . . , but it is one of history's major ironies that the man who was destined to become the greatest leader of the forces of anti-isolationism started his political career under the wing of the wealthy leaders of the A . . . n isolationist faction. He entered the arena counselling peace. His maiden-speech in the legislature was directed against the chauvinists demanding a declaration of war against the traditional enemy of A . . . , the "Empire of the East."[12] In his speech Mr. D.—he was about thirty years old—concluded with what might be termed the classic arguments and suggestions of a moderate and intelligent isolationist:

> I will sum up my suggestions and step down. I recommend to you to equip your forces against your existing enemies, but I add that you must employ those same forces in self-defence . . . against all who venture to do you wrong, though you must not set the example of wrong, either in word or in deed.[13]

Within a year after this speech (which, incidentally, contributed to a victory of the peace-party in the parliament) the M . . . n threat projected itself into the foreground. Mr. X. suddenly branched out in the direction of A . . . , though still marching far away from her borders. In a *Blitzkrieg* manoeuvre he moved south, while A . . . 's most powerful neighbor[14] openly allied herself with him. Joining a haphazard array of coalition forces,[15] the A . . . n contingent succeeded in blocking the single strategic pass[16] on Mr. X.'s route. Frustrated for the time being, he withdrew and turned his attention to outlying and weaker states in other directions. One of them, though it had formerly antagonized A . . . , now turned to the A . . . ns for help.[17] Once more, Mr. D. aided in leading the isolationist forces towards a parliamentary victory.[18] The appeal was rejected. Mr. X. was free to acquire another protectorate.

The manifest rise of M . . . n power, coupled with the aggressive policies of Mr. X., tended to undermine the isolationist control of the legislative body. The more far-seeing patriots began to realize that voluntary isolationism might lead to unwanted isolation in

the hour of war. We can discern this trend of thought in Mr. D. himself, who found an opportunity to indicate his changed convictions in a speech delivered on behalf of democratic suppliants from Rh . . . ,[19] where an oligarchic government had sold out the country to the autocratic rule of a neighbor-monarch.[20] Although acceptance of their plea would involve the people of A . . . in war, Mr. D. advocated for the first time an anti-isolationist resolution:

> Some of you, I suppose, remember that [on an earlier occasion] . . . I was the first to come forward with advice . . . not to make your hostility [towards the "Eastern Empire"] . . . the pretext for your preparations. . . . You . . . approved of my suggestion. My present speech then is the sequel of the former one. . . . If you feel that in the cause of justice you are bound to go to war, then . . . the more you are determined on such action, the less frequently will it be necessary.[21]

Mr. D. had thus adopted an attitude favoring preparedness, not as a means to prevent war but at least as a means of keeping the number of wars to an (inevitable) minimum. His change of heart in this particular case is the more remarkable because the Rh . . . ns only a few years ago had joined in a successful coalition against A . . . .[22] It was therefore difficult to find a plausible argument to persuade the A . . . n assembly to come to their aid, especially if their advocate was a well known isolationist. But Mr. D. rose to the occasion:

> It is your duty to try to save them and to let bygones be bygones. . . . I should not hesitate to say . . . that [with a non-democratic state] not even friendly relations could be permanent. . . . When men overthrow free constitutions . . . I urge you to regard them as common enemies of all who love freedom. Then again, A . . . ns, it is right that you, living under a democracy, should show the same sympathy for democracies in distress as you would expect others to show for you, if ever—which God forbid!—you were in the same plight; . . . for prosperous communities ought always to show themselves ready to consult the best interests of the unfortunate.[23]

Having thus joined the "union-now"[24] movement of his day, Mr. D. had risen far above the level of the average eloquent small-town politician. He knew, however, full well the solid strength of A . . . n isolationism:

> You have got to defeat in your debates the faction that deliberately opposes the interests of your city. . . . Owing to this opposition, you can

get nothing done without a struggle. . . . There are many politicians who recklessly take up this position. . . .[25]

The best proof of the truth of Mr. D.'s estimate was the failure of his stirring appeal for democratic solidarity. The isolationists had won once more.[26] But they might have done well to listen attentively to one brief passage in Mr. D.'s speech:

I observe that some of you are wont to dismiss Mr. X. [who was in no way involved in the Rh . . . n case] as a person of no account, but to speak with awe of the king [of the "Eastern Empire"] as formidable. If we are not to stand up to one because he is contemptible, and if we yield to the other because he is formidable, against whom . . . shall we ever marshal our forces?[27]

Within thirteen years the contemptible Mr. X. was to vanquish the A . . . n democracy and was well on his way to found one of the greatest empires a conquering despot ever ruled.

III. THE WRITING ON THE WALL.

Mr. D.'s turning away from isolationism did not correspond to a general change of political sentiment. For years to come he and his newly gained friends of the activist camp could do little more than exhort, beseech, implore an unwilling majority to free itself from the magic spell of isolationism so as to regain its ability to act, to prepare, to do at least something[28] against the lengthening shadow of M . . .n power. Already the contemptible Mr. X. had started to seize A . . . n ships, already he had executed a daring naval raid on A . . . n shores near a national shrine.[29] Presumably the activist faction was leaping on this opportunity and prevailed upon Mr. D., its latest and most eloquent member, to take a step unprecedented in his political career. Instead of waiting for the "elder statesmen" to express themselves, he brought in a motion of his own.[30] It was a fateful moment when Mr. D. definitely joined issue with Mr. X., A . . . 's most formidable enemy. It was to be a fight to the finish in which Mr. D. suffered the more tragic fate: destined to survive the downfall of A . . . , he consumed his remaining years hoping against hope for the resurrection of his country's freedom. Forced into exile, he was called back to lead A . . . 's last attempt to free herself from the conqueror's yoke. Failing again, he preferred a voluntary death to execution by the victor's henchmen.[31] But (as he himself said in one of his speeches) "the future

is hidden from all men's eyes'';[32] and little did he dream of such an end when he addressed the parliament to rally his countrymen for the coming struggle against Mr. X.:

Since . . . [we are] still debating a point on which [the elder statesmen] have often spoken before, I can safely claim your indulgence if I am the first to rise and address you. For if in the past their advice had been sound, there would be no need for deliberation today. . . . Your affairs are in this evil plight just because you, men of A . . . , utterly fail to do your duty; . . . [but] if each man will cease to expect that, while he does nothing himself, his neighbor will do everything for him, then . . . you will turn the tables on Mr. X. Do not believe that his present power is fixed and unchangeable like that of a god. No, men of A . . . , he is a mark for the hatred and fear even of those that seem now devoted to him. One must assume that even his adherents are subject to the same passions as other men. At present, however, all these feelings are repressed and have no outlet, thanks to your indolence and apathy, which I urge you to throw off at once. For observe, A . . . ns, the height to which the fellow's insolence has soared: he leaves you no choice of action or inaction; he blusters and talks big, according to all accounts; he cannot rest content with what he has conquered; he is always taking in more, everywhere casting his net round us, while we sit idle and do nothing.

When, A . . . ns, will you take the necessary action? What are you waiting for? Until you are compelled, I presume. . . . Or tell me, are you content to run around and ask one another, "Is there any news to-day?" . . . "Is Mr. X. dead?" you ask. "No, indeed; but he is ill." And what is that to you? Even if something happens to him, you will soon raise a second Mr. X., if that is the way you attend to your affairs; for even this Mr. X. has not grown great through his unaided strength so much as through our carelessness.[33]

This withering accusation of the isolationists' failure is followed by a vast rearmament program involving a return to the compulsory military service of old. The dire consequences of untimely complacency are predicted with prophetic precision:

If Mr. X. did nothing more, but were willing to rest satisfied with what he has already captured and subdued, I believe some of you would be quite content with what must bring the deepest disgrace upon us and brand us as a nation of cowards. But by always attempting something new, always grasping at more power, he may possibly rouse even you, if you have not utterly abandoned hope. . . . Surely it is obvious that he will not stop, unless someone stops him. And is that what we are to wait for? . . . If

we sit here at home listening to the abuse and mutual recriminations of our [politicians], there is not the slightest chance of our getting anything done that ought to be done. . . . In consequence our interests are ruined.[34]

As was to be expected, numerous isolationists insisted that it would matter little, or not at all, whether or not Mr. X. went on winning his wars; they had it on good authority that his plans were in no way hostile to A.... Why, then, resume the dreaded hardships of compulsory military service? Why carry the heavy burden of expense it would involve? How would the tax-payers ever be able to raise the sums required without lowering the precious standard of living below that which every self-respecting A...n citizen was wont to claim as his birthright, along with his other democratic privileges? Conscription of wealth and labor? Indeed, what for? For another era of foreign wars, which previously had proved so costly and so useless?

Against such easy-going optimism Mr. D. endeavored to make the voters see things as they were rather than as they wanted to see them:

Truly, men of A..., I do think that Mr. X. is drunk with the magnitude of his achievements and dreams of further triumphs, when, elated by his success, he finds that there is none to bar his way; but I cannot for a moment believe that he is deliberately acting in such a way that all the fools of A... know what he is going to do next. . . . But if, putting rumors aside, we recognize that this man is our enemy, who has for years been robbing and insulting us, that wherever we once hoped to find help we have found hindrance, that the future lies in our own hands, and if we refuse to fight now [overseas] . . . , we shall perhaps be forced to fight here at home—if, I say, we recognize these facts, then we shall have done with idle words and shall come to a right decision. Our business is not to speculate on what the future may bring forth, but to be certain that it will bring disaster, unless you face the facts and consent to do your duty.[35]

It was of no avail. Safely entrenched behind the wall of bourgeois complacency the isolationists defeated the military-preparedness program advocated by the faction led by Mr. D.[36] It was so much more pleasant to enjoy life as only the citizens of A... knew it.

Meanwhile Mr. X. went on conquering his neighbor states,[37] gaining all the time in military strength and experience while adding to his economic resources. At last only the state of O...[38] remained among his neighbors to be conquered. The government

of O . . . happened to be democratic at the time, but the population contained—a feature readily exploited by Mr. X. whenever possible[39]—promising fifth-column elements desirous of overthrowing the democratic régime. Skillfully Mr. X. proceeded to shear O . . . of her smaller allies before attacking her openly. Then he marched against her. The O . . . ns immediately appealed to their sister-democracy A . . . for aid. Once more the familiar spectacle of a democracy in distress asking assistance from the greatest democracy still in existence was enacted at A . . . . Once more the isolationists rose to the challenge. Once more political passions ran high at A . . . . And once more Mr. D. took the stand on behalf of his policy of democratic solidarity:

> The present crisis . . . calls on you, almost with an audible voice. . . . But, I confess, our attitude puzzles me. My own idea would be to vote for an expedition at once, to make instant preparations for its dispatch, thus avoiding our previous blunder. . . . Our chief ground for alarm is that this man, so unscrupulous, so quick to seize his opportunity, now yielding a point when it suits his purpose, now threatening—and his threats may well carry conviction—now misrepresenting us and our failure to intervene, may divert to his own purpose and wrest from us something of vital importance. . . . For the swift and opportune movements of war he has an immense advantage over us in the fact that he is the sole director of his own policy, open or secret, that he unites the functions of a military commander, a ruler, and a treasurer.[40]

Again it is the "puzzling" attitude of the isolationist majority against which Mr. D.'s attack is directed. The complete failure of their counsels is all the more glaringly exposed by the juxtaposition of Mr. X.'s successes, which are rightly ascribed to the unity of command and the singleness of purpose, factors always easier to find in a dictatorial than in a democratic system. But there is no gloating over past sins. It is the present emergency that matters. In words that are ageless Mr. D. puts the O . . . n case before the A . . . n assembly:

> The eyes of the O . . . ns are opened to the fact that they are now fighting not for glory, not for a strip of territory, but to avert the overthrow and enslavement of their fatherland. They know how he treated those . . . who betrayed their country and those . . . who opened their gates to him. And a despotism, I take it, is as a rule mistrusted by free countries, especially when they are near neighbors. . . . Make up your minds; rouse your spirits; put your heart into the war, now or never. Pay your contributions cheer-

fully; serve in person; leave nothing to chance. You have no longer the shadow of an excuse for shirking your duty.[41]

If ever there was a time to act, this was the time. All props were knocked from under the isolationists' arguments, all advantages of speedy action recounted. The reasons for the more recent A . . . n reverses were analyzed in a masterly fashion and the absolute political expediency of intervention on behalf of O . . . was shown with the translucent clarity of a political genius battling against the solid wall of foolish or intentional ignorance—a wall behind which loomed Fate, the invincible:

You must not let slip the opportunity that offers, nor make the blunder you have so often made before. . . . If we had . . . shown the required zeal in marching to the help of the first that appealed, we should have found Mr. X. to-day much more humble and accommodating. Unfortunately we always neglect the present chance and imagine that the future will right itself, and so . . . Mr. X. has to thank us for his prosperity. We have raised him to a greater height than ever ruler of M . . . reached before. To-day this opportunity comes to us from the O . . . ns unsought, a fairer opportunity than we have ever had before. . . . If we leave these men too in the lurch . . . and the O . . . ns are crushed by Mr. X., tell me what is to prevent him from marching henceforward just where he pleases. I wonder if any one of you in this audience watches and notes the steps by which Mr. X., weak at first, has grown so powerful. First he seized A . . . is, next P . . . , then Po . . . , after that M . . . e, lastly he invaded Th . . . y.[42] Then having settled . . . that country according to his purposes, off he went to Th . . . ,[42a] and there after evicting some of the chiefs and installing others, he fell sick. On his recovery, he did not relapse into inactivity, but instantly assailed O . . . .[43]

The obvious aim of the speaker is to convince his audience of the fatal blunders committed by their own inactivity, as countenanced, nay, even encouraged by the isolationist party. The failure of the preparedness program, the failure to aid the Rh . . . ns, the persistent unwillingness to face the grim realities of the political situation contribute to the anxiety in Mr. D.'s plea:

We may find that we have paid a heavy price for our indolence, and because we consult our pleasure in everything, may hereafter come to be forced to do many of the difficult things for which we had no liking, and may finally endanger our possessions here in A . . . itself. . . . It is worth while, however, to observe and consider how Mr. X. stands to-day. His

present prospects are not so bright or satisfactory as they seem and as a superficial observer might pronounce them. . . . We must assume that [the recently subjugated nations] would prefer freedom and independence to slavery. They are not accustomed to acknowledge a master, and Mr. X. by all accounts is a particularly harsh one. . . . Look then . . . upon his difficulties as your opportunity. Be prompt to take up the challenge. . . . Rouse all the other states. Reflect how eagerly [he] would march against you, if he had such a chance as we have, and if the war were on our frontiers. Are you not ashamed if, having the opportunity, you lack the courage to do to him what he would certainly do to you if he could?[44]

To the A . . . n isolationist, nothing but an invasion of one's country could ever justify a military enterprise. How pleasing, how moral a policy! And how futile, how shortsighted! For there are grave dangers lurking in such inaction:

Do not forget that you can to-day choose whether you must fight there or Mr. X. must fight here. If O . . . holds out, you will fight there, to the detriment of *his* territory, while you enjoy in security the land that is your home. But if he takes O . . . , who is to prevent his marching hither? . . . "But, my friend," cries someone, "he will not wish to attack us." Nay, it would be a crowning absurdity if, having the power, he should lack the will to carry out the threat which to-day he utters at the risk of his reputation for sanity. But if war comes within our borders, at what figure must we assess our losses?

It is the duty of all of you to grasp the significance of these facts, and to send out an expedition that shall thrust back the war into M . . . . It is the duty of the well-to-do, that spending but a fraction of the wealth they so happily possess, they may enjoy the residue in security; of our fighters, that gaining experience of war on Mr. X.'s soil, they prove the formidable guardians of an inviolate fatherland; of the statesmen, that they may give a ready account of their stewardship.[45]

This time popular support came to the aid of the interventionists. Grudgingly the isolationists had to see resolutions passed which authorized an A . . . n alliance with O . . . . A special war fund was set aside to finance the military effort,[46] but through isolationist obstruction, this fund was limited to an amount wholly insufficient for the military enterprise contemplated.[47] In consequence the size of the A.E.F.[47a] was curtailed to such an extent that the interventionists, even before this meagre force actually sailed,[48] felt it necessary to demand a more vigorous prosecution of the war. Their spokesman again was Mr. D., who by this time had become the outstanding foe of A . . . n isolationism:

That Mr. X. has found men willing to fight him, situated at his frontiers and possessed of considerable power, above all so determined that they regard any accommodation with him as both delusive and fatal to their own [country]—this has all the appearance of a superhuman, a divine beneficence. So the time has come . . . to look to it that we do not prove more unfriendly to ourselves than circumstances have been, for we shall show ourselves the meanest of mankind, if we abandon . . . the very allies that fortune has raised for us and the chances she throws in our way.[49]

Here is as clear-cut an argument for intervention on foreign soil as any interventionist has ever propounded. The grave truth, unpleasant and perhaps immoral, that it is better to fight abroad when your country's future is at stake instead of waiting passively, even though well prepared, until the lightning blow of invasion strikes you at home,—this has always been the interventionist's main argument. It may often have been used to camouflage a multitude of predatory sins. Equally and perhaps more often, it has contained the true view as to the political and ideological future of a nation. And such was the case in this instance. In this particular historical situation the very character of Mr. X., the driving elements of his nature, the stormy course of his rise, the shaky foundations of his power, were effectively used to bolster up the interventionists' efforts to induce their fellow-citizens to make a stronger effort than they had been willing to make heretofore:

Those who stand aghast at [Mr. X.'s] apparent invincibility shall see that he has exhausted all the arts of chicanery on which his greatness was founded at the first, and that his career has now reached its extreme limit. . . . He has hoodwinked everyone that has had any dealings with him; he has played upon the folly of each party in turn and exploited their ignorance of his character. That is how he has gained his power. Now, even as he has raised himself by these arts, while every community imagined that they were to be the recipients of his favors, so by the same arts he is to be brought low again, now that the utter selfishness of his conduct has been amply demonstrated. . . . When a man has gained power as Mr. X. has, by rapacity and crime, then the first pretext, some trifling slip, overthrows and shatters all. . . .

Glory is his sole object and ambition; in action and in danger he has elected to suffer whatever may befall him, putting before a life of safety the distinction of achieving what no other [ruler of his country] ever achieved. But his subjects have no share in the glory that results. They are perpetually buffeted and wearied and distressed by these expeditions north and south, never suffered to give their time to their business or pri-

vate affairs, never able to dispose of such produce as they can raise, because the war has closed all markets. . . . Hence it is not difficult to see how the majority of [his subjects] regard Mr. X. As for his élite corps and storm-troopers,[50] they have indeed the name of admirable soldiers, well grounded in the science of war, but . . . they are no better than other soldiers. . . . Anyone among them who can be described as experienced in war and battle, . . . Mr. X. from jealousy keeps in the background, because he wants to have the credit himself of every action, among his many faults being an insatiable ambition. . . . For the present, however, his prosperity throws all this into the shade (for success is apt to cover a multitude of faults); but if he trips, then we shall know all about his vices. And it seems to me . . . that we shall not have to wait long for the exposure, if heaven wills and you so resolve. For . . . as long as the wars [of states] are on foreign soil, few detect their weaknesses, but when the shock of battle is on their frontiers, it makes all their faults perfectly clear.[51]

Golden words, verified a thousand times throughout history, and again forgotten a thousand-and-one times. The tragic misconception underlying this profound analysis of the roots of Mr. X.'s power, of any military dictator's power, is a firm belief in the inevitable triumph of that cause which is morally superior. Only in the long run—perhaps—this belief may find itself vindicated; but even if it failed then, even if it failed time after time ever since, even then it is one of man's redeeming potentialities that such a belief could be born.

We sit here [continued Mr. D.] doing nothing. But one who is himself idle cannot possibly call upon his friends . . . to work for him. No wonder that Mr. X., sharing himself in the toils of the campaign, present at every action, neglecting no chance and wasting no season, gets the better of us, while we procrastinate and pass resolutions and ask questions. I cannot wonder at this: the contrary would rather surprise me, that we, performing not a single duty of a combatant, should overcome the man who fulfills them all. . . . The outcome is strife and contention among yourselves, some taking this side and some that, while the interests of the state suffer. You conduct your party politics . . . by lobbies.[52] Each lobby has an orator for chairman . . . and three-hundred [assembly-members] to do the shouting. The rest of you are attached now to one party and now to another. Surely this system must be abandoned. You must be once more your own masters, and must give to all alike the same chance to speak, to counsel, to act. But if you authorize one class of men to issue orders like absolute monarchs, and force another class to equip the navy and pay the war-tax and serve in the field, while yet a third class has no other public duty than to vote in

condemnation of the latter, you will never get anything essential done at the right time. There will always be some class with a grievance, who will fail you, and then it will be your privilege to punish them instead of the enemy.[53]

Never, perhaps, has there been presented a clearer picture of the danger of party-politics within a democracy in a time of crisis. The isolationist faction, howling down any measure intended to strengthen the nation in the present emergency, is here charged by implication with abuse of the A . . . n democratic institutions. If that party cannot outvote its opponents, it is still strong enough to sabotage action against the M . . . n threat by obstructionist lobbies and other outside influences.

The success of the interventionists' renewed effort went far enough to bring about the removal of the general who had first headed the small A.E.F.,[54] assembled after the first appeal from O . . . .[55] Reinforcements were gathered and a new general appointed.[56] But the financial measures demanded by the interventionists were defeated. They had brought in a motion to apply the relief funds[57] to the energetic prosecution of the war overseas. Everybody familiar with such matters will easily realize that this motion gave the isolationists enough supporting votes to defeat the bill handsomely. The proposal was held unconstitutional.[58] It might have saved the whole constitution. Meanwhile, things were not going well with the O . . . ns. Outnumbered as well as outgeneraled, the defenders had to rely on their system of fortifications to stave off the M . . . n onslaught. They fought desperately, but without hope. The great A . . . n colonies overseas were their only possible source of support. In turn they were its first line of defence. What could seem more natural than to appeal for more extensive aid, for assistance that should come soon? The small A.E.F. was not enough. It even refused to fight under a joint-command and insisted on carrying out its own sluggish and predatory operations without much regard for the plight of its O . . . n allies. As if to dare fate, a last effort was made by the A . . . n interventionists to save the situation. They brought in a bill to remove the constitutional barrier which prevented the use of the relief funds for war purposes.[59] It was the last chance offered the great A . . . n democracy, and to Mr. D. fell the thankless task of holding forth against the inevitable:

I am perfectly well aware that A . . . once had the chance . . . of punishing Mr. X. Now, however, I am persuaded that we must be content to secure the . . . saving of our allies. . . . Never was there a crisis that demanded more careful handling than the present. . . . Most of your chances have escaped you rather from a disinclination to do your duty than from a failure to understand it. . . . The popularity-hunting of some of our orators has led us into this desperate predicament. . . .

Well, what is done cannot be undone; but . . . if you do not send help "in full muster, whereto your power shall extend," observe how all your generalship will make for Mr. X.'s success. We could count on the O . . . ns with their considerable resources . . . for here was a powerful state, reconciled to us. . . . What remains then . . . but to help them with all your power and energy? I see no alternative. For, quite apart from the disgrace that we should incur if we shirk our responsibilities, I see not a little danger, men of A . . . , for the future, if . . . there is nothing to hinder Mr. X., when he has crushed his present foe, from turning his arms against A . . . . But surely if anyone of you would postpone the necessary action till then, he must prefer to see danger at his very doors, rather than hear of it far away, . . . ; for I suppose we all realize that that is what it will come to, if we throw away our present chances.[60]

But the A . . . n isolationists labored under their usual delusion: "If we do not interfere in other peoples' affairs, they are not going to interfere in ours." The delusion was encouraged through the fear of organized politicians to lose their hold over public moneys and soft jobs in such times of emergency:

What is the cause of all this? . . . Because . . . the politicians hold the purse-strings and manage everything, while you, the people, robbed of nerve and sinew, stripped of wealth and of allies, have sunk to the level of lackeys and hangers-on, content if the politicians gratify you with a dole from the relief funds . . . ; and your manliness reaches its climax when you add your thanks for what is your own. . . . You cannot have a proud and chivalrous spirit, if your conduct is mean and paltry; for whatever a man's actions are, such must be his spirit. . . . If, therefore, even at the eleventh hour, you can shake off these habits, and consent to fight and act like A . . . ns and to devote your abundant resources that you have at home to the attainment of success abroad, . . . I call on you to do that for yourselves . . . and not to desert that post of honor . . . which your ancestors through many glorious hazards won and bequeathed to you.[61]

In vain. Nothing could induce the A . . . n people to sacrifice a major part of their cherished relief appropriations for preparedness and a war effort.[62] When it was too late, *i.e.*, two years after-

wards, a special war-tax was introduced.[63] It fits well into the general picture that, when finally the O... ns had lost their last outer bastions and mobile forces, when their capital was besieged by Mr. X.,—that then, and only then, A... n isolationist sloth was overcome to the extent of actually dispatching a none-too-large corps of A... n citizens to the assistance of O... .[64] In true operetta fashion this tragi-comic army arrived at the scene of operations just when O... had ceased to exist and its inhabitants had become the slaves of Mr. X.[65] Another democracy had perished.

For the moment A... was rudely shaken. The isolationists lay low. Many of them even volunteered for participation in the numerous diplomatic missions now sent out in a futile search for allies in a common effort to resist the M...n menace.[66] Nothing was to come of it. Most of the smaller states deemed it wiser to come to terms with Mr. X. rather than to associate themselves with a democracy that had in such a signal fashion shown itself incapable of rendering effective assistance to Mr. X.'s most recent victim. Thus, forced back towards their isolationist policy, blissfully ignorant of the future (which in less than ten years would see the downfall of A... n democracy), the government embarked on a policy of general appeasement.[67]

IV. AN ERA OF APPEASEMENT.

Skilfully distributed "subsidies" no less than his formidable political successes had enabled Mr. X. to frustrate the short-lived diplomatic offensive undertaken by A... after the fall of O... .[68] When the states to the south,[69] refused to participate in the A... n scheme of cooperation, nothing remained for A... but to come to terms with Mr. X. Even the most stout-hearted patriots were forced to realize that nothing else could be done after the fall of O... and the failure of A...'s belated diplomatic offensive. This sentiment governed Mr. D., always a patriot, never a fanatic. It made him participate in what must have been to him, of all A... ns, the most bitter task of his life: he joined an A... n delegation sent to seek the terms of appeasement from the ruthless and crafty Mr. X. To make things still harder for Mr. D., the coming leader of the A... n isolationist party, Mr. A.,[70] as well as other leading isolationists were also members of the delegation. The dramatic moment when Mr. X. and Mr. D. first met face to face has symbolized for all time the meeting of an ascendant military dictator

with the spokesman of democracy forced to seek terms from dictatorship. The greatness of the moment is clearly recognizable even in the biased and derisive account Mr. A. gives of the event. It is Mr. D.'s turn to address Mr. X.:

> All were intent expecting to hear a masterpiece of eloquence. . . . So, when all were thus prepared to listen, this creature mouthed forth a prooemium—an obscure sort of thing and as dead as fright could make it; and getting on a little way into the subject he suddenly stopped speaking and stood helpless; finally he collapsed completely. Mr. X. saw his plight and bade him take courage, and not to think, as though he were an actor on the stage, that his collapse was an irreparable calamity [How Mr. X. must have gloated in saying that!], but to keep cool and try gradually to recall his speech, and speak it off as he had prepared it. But he, having been once upset, and having forgotten what he had written, was unable to recover himself; nay, on making a second attempt, he broke down again. Silence followed; then the herald bade us withdraw.[71]

Mr. D. had no need to apologize. The champion of freedom, overcome when capitulating before the champion of force, is more impressive in his silence than the glib appeaser Mr. A. can possibly have been in his most eloquent speech before Mr. X.

The delegates brought home the terms:[72] A separate peace, leaving A . . .'s allies to the tender mercies of Mr. X. Beyond that he proposed an alliance between himself and A . . . .[73] Still Mr. D.—after the official report had been given by the oldest member of the delegation—not only went through the customary procedure in asking for a vote of thanks for the delegates, but also moved to have the envoys of Mr. X. (upon their arrival) accorded the honors normally granted to foreign ambassadors.[74] The motion was supported—from varying motives, to be sure—but nevertheless supported by one of the strangest trios A . . . n politics ever produced, namely, by the fifth-columnist Mr. Ph.[75] as well by the honest though narrow-minded isolationist Mr. A., and finally by the disappointed Mr. D., who for the moment held any war-policy impossible.[76] Appeasement, almost unanimously advocated by the political leaders of the nation, became the catchword of the day. The only feeble effort to safeguard the future—a feeble effort because its success depended on Mr. X.'s (and his ambassadors') consent[77]—was the exclusion of a clause from the treaty which had made it a separate peace, leaving A . . . s' allies to the tender mercies of Mr. X.[78] Although sceptical as to the success of such a

belated diplomatic effort, Mr. D. supported the striking out of the "separate-peace" clause, at least by tacit consent.[79] Events moved fast. Within four days after the delegates had reported Mr. X.'s terms, the A . . . n assembly (with the one exception noted above) had ratified them, voting at the same time that a second embassy should be sent to Mr. X. to witness his own ratification.[80] The critical point was, of course, the fate of the A . . . n allies, one of whom guarded the all-important pass through which any M . . . n army would have to march on its way against A . . . .[81] It was of vital concern whether or not Mr. X. would at least include this ally in the peace-treaty. Only a deluded optimist and convinced "appeaser" might hope so. Mr. D. did not. Although he consented, for the sake of presenting a united front, to participate in the second embassy with the same men who had composed the first delegation,[82] his personal relations with them were far from cordial. The contrast between the blind appeaser Mr. A. and the more far-seeing Mr. D. on the meaning of the massed military forces they observed on their voyage is typical. Even while the second embassy—very unwilling and slow to start and amazingly slow to reach Mr. X.[83]—was on its way, one of A . . .'s hapless allies had already fallen victim to Mr. X.'s attack.[84] It was ominous enough that after reaching M . . . the A . . . n delegates received nothing more reassuring than some vague promises from Mr. X. that he would consult with A . . . before attacking her last important ally, the Ph . . . ns.[85] It was more ominous still that the embassy trailed Mr. X. half-way towards A . . . , before he actually ratified the peace-treaty (his version, of course) at Ph . . . ae,[86] in the midst of an assembled military force which could have but one goal at which to strike.

The envoys returned from their voyage. This time the remnant of the "united front" had disappeared. Mr. D. implored the A . . . ns not to sacrifice their Ph . . . n ally. In vain, Mr. A.—reaching the zenith of his political career—spoke for peace and security, for peace with honor. Three days after the return of the second embassy the A . . . n assembly formally advised the Ph . . . ns to surrender their most important stronghold, D . . . .[87] They took the hint but in a different fashion: within a week they surrendered, not D . . . , but the all-important defile of Th . . .[88] which opened the way for a future direct attack on A . . . and all states south of the Isthmus. Ironically enough, the news of this disaster reached a

third A . . . n embassy on its way to Mr. X.[89] There was nothing to be done at this stage. A feeble diplomatic gesture was the only official A . . . n reaction.[90] Nevertheless the catastrophic result of the appeasement policy provoked among all but the inveterate isolationists and appeasers an awakening which was to assert itself in the future. For the moment, however, everything remained peaceful. But in the very depth of defeat Mr. D. appears to have planned for the day when, in spite of isolationist defeatism, he might once more rally allies to the side of A . . . , an A . . . that through years of preparation would be able to encounter successfully the powerful armies of Mr. X. and thus would re-establish not only her own independence but even her own leadership among a group of affiliated sister-states. The first step towards a policy aiming at a resurrection of the fallen fortunes of A . . . was a thorough house-cleaning. The confidence of the voters in the leaders of isolationism and appeasement had to be broken. Within a few weeks after the disaster of Th . . . ae an A . . . n politician of second rate, Mr. Ti . . . s,[91] brought suit against Mr. A. for treasonable misconduct during his participation in the second embassy. Mr. D. joined in the accusation. Mr. A. retaliated at once by striking at his less formidable opponent, Mr. Ti . . . s whom he charged with unnatural crime. The trial gave Mr. A. an opportunity to display himself as the paragon of virtue. Like other men of his type he stressed the outward forms of virtue, the superficial criterion of obedience to the letter of the law, rather than to its spirit, and sang an (always popular) paean in favor of what seemed to him the essence of democratic government:

> Autocracies and oligarchies are administered according to the temper of their lords, but democratic states according to established laws. . . . Therefore you, who have a government based upon equality and law, must guard against those whose words violate the laws (Mr. D.) or whose lives have defied them.[92]

A curious sidelight is thrown on Mr. A.'s tactics by his comparison between the moral standard of his opponent, a politician, and that required of the teaching profession:

> Consider the case of the teachers. Although the very livelihood of these men . . . depends on their good character, while the opposite conduct on their part would mean poverty, . . . the lawgiver distrusts them.[93]

At last, however, the mask was dropped:

Did you put to death the professor, S..., fellow citizens, because he was shown to have been the teacher of C...[94] who put down democracy, and after that, shall Mr. D succeed . . . , Mr. D. who takes such vengeance on private citizens and friends of the people for their freedom of speech? . . . He will lug in my speeches, and find fault with the peace which was brought about through Ph...s[95] and myself, until he shall call out such bursts of applause from the jurors that I will not even face him in the court-room to defend myself when I render account of my service on the embassy, but will consider myself lucky if I get off with a moderate fine instead of being punished with death.[96]

Mr. A. succeeded in winning the first skirmish by obtaining the conviction of Mr. T. on charges of moral turpitude. But all his eloquence about free speech and the terrible revolutionary Mr. D., was to avail Mr. A. but little when, after a delay of three years, the main suit was finally brought to trial.[97] Meanwhile, the unsavory trial of Mr. T. marks the fitting end of the era of A...n appeasement in the ascendancy. The anti-climax, leading to an eclipse of A...n isolationism, was to come soon.

V. THE BITTER END.

While Mr. A. busied himself with eulogizing the trimmings rather than the essence of democracy, Mr. X., about whose morals hardly any A...n dared to worry any more, went on forging a network of alliances, with the result that as time went on isolationist A... was in turn almost completely isolated herself. In vain did A...n embassies try to stem this development by numerous good-will embassies touring the states south of the Isthmus.[98] Mr. X. continued methodically to strip democratic A... of all actual or possible allies. The effectiveness of his policy was driven home to Mr. D. who participated in those ill-starred embassies.[99] He realized to what end Mr. X. went to so much trouble and expense, but few A...ns were aware of the real meaning of the developments in the southern republics. The isolationists refused to be worried; even though a general war-tax was at last introduced[100] they must have considered it a mere palliative for the growing restiveness following the recent "peace with honor." The deep cleavage between them and the more far-seeing patriots is evident from the following passage (Mr. D. speaking):

If . . . we are not to be confronted by a mighty power which we shall be unable even to withstand, then our method of deliberation must be

changed. . . . If anyone views with confidence the present power of Mr. X. and the extent of his dominions, if anyone imagines that all this imports no danger to our country and that you are not the object of his preparations, I must express my astonishment, and beg you all alike to listen to a brief statement of the considerations that have led me to form the opposite conclusion and to regard Mr. X. as our enemy.

This is the signal for the attack against the old guard. Against their arguments, against the policies based upon them, Mr. D. is now pitting his own.

Guided in his calculations by ambition and the desire of universal dominion, regardless of the claims of peace and quietness and justice, Mr. X. rightly saw that to our state and our national character he could offer nothing, he could do nothing that would tempt you from selfish motives to sacrifice to him any of the other . . . states, but that you, reverencing justice, shrinking from the discredit involved in such transactions . . . would resist any such attempt on his part as stoutly as if you were actually at war with him. . . . By his very acts you stand judged the one and only power in the world incapable of abandoning the common rights of [western civilization] at any price, incapable of bartering your devotion to its cause for any favor or any profit. . . . Everything, if correctly observed, points to the fact that all his intrigues are directed against A. . . . He knows . . . these two facts—that he is intriguing against you and that you are aware of it. Assuming that you are intelligent, he thinks you are bound to hate him, and he is on the alert, expecting some blow to fall, if you can seize an opportunity and if he cannot get in his blow first. That is why he is wide-awake and ready to strike, and why he is courting certain people to the detriment of our country. He imagines that their cupidity will lead them to accept the present situation, while their natural dullness will prevent them from foreseeing anything that may follow.

To put it bluntly, Mr. X. is engaged in softening the will to resist him by cultivating (through direct bribery no less than by more subtle means) the friendship, the goodwill, the benevolent neutrality, or at least a defeatist attitude, among influential A...ns. Such efforts are most dangerous in a democracy where freedom of speech and civic rights in general provide a fertile field for the dissemination of such insidious propaganda:

But there is one common bulwark which the instinct of sensible men possesses within itself, a good and safe one for all, but invaluable for democracies against tyrants. And what is that bulwark? It is mistrust. Guard that; hold fast to that. If you preserve it, no harm can touch you. What

is your object? . . . Freedom. Then do you not see that Mr. X.'s very titles are utterly irreconcilable with that? For . . . every despot is the sworn foe of freedom and of law. Beware . . . lest, seeking to be rid of war, you find a master. . . .

From this the immense difficulty of any fight against isolationism can be clearly perceived. On the one hand, there are Mr. D.'s arguments, which are of the loftiest. On the other, there are the pleasing appeals of the isolationists playing on the innate dislike of a democratic citizenry to sacrifice their small joys of peaceful everyday life for the grave uncertainties of war. Loss of life no less than financial reverses are the obvious consequences of war. Greater, however, may be the losses arising from a false notion of national security to be guaranteed by a policy of isolationism and appeasement:

You . . . are compassed about with plots and snares, you will . . . find to your surprise that, through having nothing done in time, you have submitted to everything. . . . It would indeed have been fair . . . to call upon those who conveyed to you Mr. X.'s promises, on the strength of which you were induced to conclude the peace. . . . Yes, and there are others who ought to be called upon. Whom do I mean? The men who, when peace was made and when I . . . spoke out and protested . . . told you that I, being a teetotaler, was naturally a disagreeable, cross-grained fellow, and that Mr. X . . . would do just what you would pray for. . . .

I do not wish to indulge in idle talk. But I think that one day Mr. X.'s policy will cause you more distress than it does now, for I see the plot thickening. I hope I may prove a false prophet, but I fear the catastrophe is even now only too near. . . . While the danger is in the future and is gathering head, while we can still hear one another speak, I want to remind each one of you, who . . . it is that has forced you to take counsel, not for your rights and interests abroad, but for your possessions here at home and for war in A . . . , a war which will bring distress on everyone of us, when it does come, but which really dates from that very day. For if you had not been hoodwinked then, there would be no anxiety in A . . . , because Mr. X. could never, of course, have gained command of the sea and reached A . . . with his fleet.[101]

It may perhaps be questioned whether a nation so honeycombed with fifth-columnists as A . . . was by this time could still have waged a successful war against Mr. X. But the situation had now made a complete break almost inevitable. To Mr. D. fate had reserved the glorious and tragic rôle of casting down the gauntlet for

the second challenge, the second battle between freedom and tyranny in western history. His speech was the swan song of A . . . n freedom; in it we hear him, the "war-monger," for the last time pitting reason, culture and freedom against force, semi-barbarism, and tyranny:

> Since the conclusion of the peace, . . . all our interests have been completely betrayed and sacrificed. . . I do not think they could have been in a worse condition than they are to-day. Perhaps, indeed, this condition of our affairs may be attributed to many causes and not just to one or two, but a careful examination will convince you that it is above all due to those who study to win your favor rather than to give you the best advice. Some of them, . . . interested in maintaining a system which brings them credit and influence, have no thought for the future; while others, by blaming and traducing those in authority, make it their sole aim that our state shall concentrate her attention on punishing her own citizens, while Mr. X. shall be free to say and do whatever he pleases.

It was in such an atmosphere, unsavory, marked by sluggish currents of political sentiment, brightened only by a few strokes of lightning when the leaders of the two opposing factions clashed in court, that the few preparations for the last struggle had to be made. But now, towards the end of this six-year interval, the grim fact that it takes two not only to wage war but also to keep peace was at last driven home to the awakening A . . . n masses:

> If indeed A . . . can remain at peace and if the choice rests with us . . . I personally feel that we are bound to do so . . . ; but if there is another person concerned, with sword in hand and a mighty force at his back, who imposes on you with the name of peace but himself indulges in acts of war, what is left but to defend ourselves? If you choose to follow his example and profess that you are at peace, I raise no objection. But if anyone mistakes for peace an arrangement which will enable Mr. X., when he has seized everything else, to march upon us, such a man has taken leave of his senses, and the peace that he talks of is one that you observe towards Mr. X., but not Mr. X. towards you. That is the advantage which he is purchasing by all his expenditure of money—that he should be at war with you, but that you should not be at war with him.

The last sentence sums up Mr. X.'s policy in the five preceding years: the technique of wooing and intimidating A . . .'s potential allies one after the other, the lavish funds out of which the undercover propagandists of Mr. X. financed not only themselves but

also their campaigns. Adding to this corps of hirelings the hopelessly myopic, the genial Micawbers, the cowards, and the honest pacifists, one understands the difficulties besetting less shortsighted A . . . n patriots in their desperate efforts to make the blind see, the slothful act, the traitors rally to the national cause, the pacifists go to war. To heighten these difficulties, conditions have changed: no precedent about the technicalities involved in the outbreak of war holds any longer:

> If we are going to wait for him to acknowledge a state of war with us, we are indeed the simplest of mortals; for even if he marches straight against A . . . . . he will not admit it, if we may judge from his treatment of other states. . . . On all previous occasions, when accused of hostile intentions, he indignantly sent ambassadors to justify his conduct. . . . And do you imagine that . . . in your case he will give warning of hostilities, especially when you are so eager to be deceived? Impossible! . . . But, in heaven's name, is there any intelligent man who would let words rather than deeds decide the question who is at peace and who is at war with him? Surely no one.

There was, in truth, at this moment no retreat possible. True, so far only colonial incidents had ruffled the oily surface of the peaceful relations between A . . . and Mr. X. But developments had begun to outgrow the sphere of a mere "imperialist" war between the two powers. No more was the fate of A . . . alone at stake. The entire system of civilization of which A . . . was but one though the most glorious member was now at stake. How did this situation arise? A brief résumé of Mr. X.'s rise to power might help to answer this question:

> Mr. X. rose to greatness from small and humble beginnings . . . the [various] states are mutually disloyal and factious, and . . . the increase of Mr. X.'s power in the past was a far greater miracle than the completion of his conquests now that he has already gained so much. . . . All men, and you, first of all, have conceded him . . . the power of doing what he likes, of calmly plundering and stripping the [various] states one by one, and of attacking . . . and reducing them to slavery. . . . All the faults committed . . . by our ancestors in their seventy years of supremacy, are fewer, men of A . . . , than the wrongs which Mr. X. has done to the [various states] in the thirteen incomplete years in which he has been coming to the top. . . . Has he not robbed them of their free constitutions and of their very cities . . . in order to enslave them—not city by city, but tribe by tribe? Are not tyrannies already established . . . not far . . . from A . . . ? Does he

not write explicitly in his letters, "I am at peace with those who are willing to obey me?"

A very appropriate definition of peace! A peace built on the trembling obedience of suppressed nations, built on the ruins of democratic freedom, built on the foundation of purely military triumphs, a peace of death! This is indeed the wider arena in which the show-down between A... and the M...n dictator is about to take place.

Neither the [western] nor the barbarian world is big enough for the fellow's ambition. And . . . yet . . . we are in such miserable position, we have so entrenched ourselves in our different [national states], that to this day we can do nothing that our interest or our duty demands; [the "we" applies to the different states in this instance] we cannot combine, we cannot take any common pledge of help or friendship; but we idly watch the growing power of this man, each bent (or so it seems to me) on profiting by the interval afforded by another's ruin, taking not a thought, making not an effort, for the salvation of [the entire western civilization]. For that Mr. X., like the recurrence or attack of a fever or some other disease, is threatening even those who think themselves out of reach, of that none of you is ignorant. . . . Yet we see all this and suffer it, we seem to watch him just as we would watch a hailstorm, each praying that it may not come his way, but none making any effort to stay its course. . . . We hesitate one and all, we play the coward, we keep an eye on our neighbors, distrusting one another rather than our common foe. Yet if he treats us all together with such brutality, what do you think he will do when he has got each of us separately into his clutches?

As an indictment of ostrich-like isolationism in the face of a brewing storm this passage is unmatched in history. Each national state clings to its precious neutrality, while its neighbors are devoured one after the other, each little country hoping that the storm may pass without touching it. Traditional particularism enjoys its last euphorian hey-day, before the conqueror's heel puts an end to the dying flicker of local sovereignty. Clearly enough Mr. D. points out the tragic failure of the other republics to grasp the historic necessity of choosing between voluntary and enforced cooperation. Such blindness prevailing on the eve of the death-struggle between A... and M... cannot be ascribed to sheer ignorance alone. It presupposes the existence of serious social rifts, it presupposes the cultivation of an isolationist outlook by a class unable to rise above a desire to preserve its economic privi-

leges, its hard-won social and economic gains. Unable to realize that more basic values than these exist, such groups play into the hands of any unscrupulous foreign power:

> Not without reason [our ancestors] were as eager for freedom as their descendants to-day are for slavery. There was something, men of A . . . , something which animated the mass . . . but which is lacking now: . . . The opportunity for action could not be bought at a price from our politicians or our generals; no, nor our mutual concord, nor our distrust of tyrants and barbarians, nor, in a word, any such advantage. Now, however, . . . we have imported vices which have infected [our civilizaton] with a mortal sickness. And what are those vices? Envy of the man who has secured his gains; contempt for him who confesses; pardon for those who are convicted, hatred for him who censures such dealings; and every other vice that goes hand in hand with corruption. For warships, men in abundance, money and material without stint, everything by which one might gauge the strength of our states, these we as a body possess to-day in number and quantity far beyond [our ancestors]. But all our resources are rendered useless, powerless, worthless by these traffickers.[102]

In the parliamentary speech from which we have taken the last quotations, in the very speech which opens a breach that cannot be bridged, Mr. D. thus rises to the highest conception of any truly inspired democrat: a voluntary union of all countries having a common cultural, a common social, a common democratic heritage, even though the individual constitutions, customs and traditions may be of different shades. The tragic fact that but a few voices were calling out to the masses sunk in the sloth of traditional separatism made the situation all the more poignant. On the eve of their final downfall but one major state was to heed the appeal for cooperation,[103] too late to turn the tide. In the light of later developments the condition of A . . . on the eve of the great war can truly be called ominous. In A . . . no less than in other democracies internal discord, latent social warfare, dislocation of the old moral and political standards, created in the most various social strata, as a sort of common denominator, a widespread feeling in favor of isolationism. Worse than that, there existed a small but competent fifth-column in every single country to be attacked by Mr. X. And his attacks were made still more dangerous by his unorthodox (to put it mildly) method of opening his campaigns without a formal declaration of war. On the contrary, in most instances a "peace-offensive," accompanied by loud protestations of

his good-will towards his prospective victim, had preceded the lightning blow. New as his technique of the opening moves of warfare was, it was ably matched by a revolutionary change in military strategy and tactical methods:

> For my own part [said Mr. D.], while practically all the arts have made a great advance and we are living to-day in a very different world from the old one, I consider that nothing has been more revolutionized and improved than the art of war. . . . [In older times] they never used money to buy an advantage from anyone, but their fighting was of the fair and open kind. But now you must surely see that most disasters are due to traitors, and none are the result of a regular pitched battle. On the other hand you hear of Mr. X. marching unchecked, not because he leads . . . heavy infantry, but because he is accompanied [by fast mobile forces]. When . . . he attacks some people that is at variance with itself, and when through distrust no one goes forth to fight for his country, then he brings up his artillery and lays siege. . . . Since, however, you all know this, you must take it into account, and not let the war pass into your own country; you must not come to grief through keeping your eyes fixed on the simple strategy of . . . old . . . , but arrange your political affairs and your military preparations so that your line of defence may be as far away from A . . . as possible.[104]

The war now being inevitable, technical questions of strategy had become vitally important. The pet strategic plan of the isolationists, to wait until invaded, becomes criminal negligence when proposed against a foe of Mr. X.'s type. To rely on some ill-defined line of future defence at home means to concede the enemy the invaluable military advantage of the choice of the moment to strike. It may be considered unscrupulous to suggest an attack as a means of defence—isolationism has always branded preventive war as unpardonable—but it is still worse to indulge in fatuous and fatal optimism with regard to one's enemies. To trust that things will turn out right anyway means courting disaster which will not be long in coming. Such, to the last, was the burden of Mr. D.'s warnings to his countrymen:

> It is folly and cowardice to cherish such hopes, to follow ill counsel and refuse to perform any fraction of your duties, to lend an ear to the advocates of your enemies and imagine that your country is so great that no conceivable danger can befall it. Aye, and a disgrace too it is to have to say, when all is over, "Why! who would have thought it?" . . . As long as we are safe, blessed with a great country, ample advantages, and the fairest repute—what are we to do? . . . We must make provision for our

defence, I mean with warships, funds, and men; for even if all other states succumb to slavery, we surely must fight the battle of liberty.[105]

Truly, a strange and suicidal triumph of A . . . n isolationism it was, that A . . . was about to enter her most decisive war in complete (though far from splendid) isolation. Yet, though time was short, no stone must be left unturned in an effort to lead A . . . out of this situation:

We must lose no time in calling upon the other states . . . so that if you win them over, you may have someone to share your dangers and your experiences when the time comes. . . . And while we make preparations for ourselves, we must summon, collect, instruct, and exhort the rest of the states. . . . This is the task for you; it was for you that your ancestors won this proud privilege and bequeathed it to you at great and manifold risk.[106]

Nothing remained but the final test. It came. The challenge, at last accepted by A . . . , led to an open break between A . . . and Mr. X. His method of handling the affair provides an object lesson in dictatorial hypocrisy in dealings with democratic states. The despot plays the rôle of the poor wolf wronged so grievously by the terrible little lamb:

Though I . . . was willing to come to a just agreement with you [Mr. X. wrote] . . . you turned a deaf ear to the representations of [my] ambassadors. . . . [To have accepted my proposals] would not have paid your talkers. For those who have any experience of your constitution say that to the orators peace means war and war means peace; because they always manage to make something out of the generals either by backing them up or by blackmailing them, and also, by abusing from the public platform your most prominent citizens and the most esteemed of your foreign residents, they win a reputation with the mob for democratic zeal. Now it would be easy for me at a trifling expense to stop their abuse and set them singing my praises. . . .[107]

In this last jeer Mr. X. was characteristically falsifying the fact. As he doubtless had reason to know, no amount of money would have sufficed to buy Mr. D.; and there were thousands of upright A . . . ns like him.

And so we come to the fateful conclusion of Mr. X.'s letter; it raises the curtain on the second great war between despotism and democracy:

As you were the aggressors and, thanks to my forbearance, are making still further attacks on my interests and doing me all the harm in your

power, I shall defend myself, with justice on my side, and . . . I shall bring my dispute with you to an issue.[108]

At this stage our case-history closes. Although our own view regarding the justice of Mr. X.'s cause may differ from his own, one thing is certain. The deathblow which he was about to strike at A . . . , and through A . . . at freedom, found a victim fatally weakened through many years of isolationist sentiment and its practical application, a policy of isolation and inaction. The crowning irony of the dénouement lies in the fact that at the end of an era of isolationism unprecedented in the history of A . . . , the A . . . ns found Mr. X. declaring war on them for being—aggressors! And if there is any lesson to be derived from this case-history, it may lie in this fact: Mr. X. succeeded in crushing A . . . , and with his triumph her independence and her democratic institutions were lost for more than two thousand years.

Mount Holyoke College

NOTES

[1] Quotations, unless otherwise mentioned, have been taken from the Loeb edition of Demosthenes' *Speeches,* ed. in two vols. by C. A. Vince and J. H. Vince, London and New York, 1926–1930; Aeschines' *Speeches,* ed. by C. D. Adams, London and New York, 1919. Square brackets indicate slight verbal changes, usually in the interest of brevity.

[2] For one of the best known instances see E. Ardaillon, *Les mines du Laurion dans l'antiquité,* Paris, 1897.

[3] Athens in the middle of the fourth century B.C.

[4] Macedonia.

[5] King Philip of Macedonia.

[6] Compare P. Jouguet, *L'impérialisme macédonien et l'hellénisation de l'Orient,* Paris, 1926; for the period up to Philip's accession see F. Geyer, *Makedonien bis zur Thronbesteigung Philipps II.* (Beiheft 19 der *Historischen Zeitschrift,* München and Berlin, 1930). On Philip see A. Momigliano, *Filippo, il Macedone: Saggio sulla storia greca del IV secolo a. C.,* Florence, 1934; for Philip's later period compare W. Reichenbaecher, *Die Geschichte der athenischen und makedonischen Politik vom Frieden des Philokrates bis zum Korinthischen Bund,* Halle, 1897.

[7] Olynthus. See A. B. West, *The History of the Chalcidic League* (Bulletin no. 969 of the University of Wisconsin, History Series, vol. IV, no. 2, Madison, 1919); J. Papastavru, *Amphipolis . . .* (Reprint from *Klio,* Beiheft 37, Neue Folge, Heft 24, Leipzig, 1936). On Olynthus see M. Gude, *A History of Olynthus,* Baltimore, 1933; also H. Weil, *La guerre d'Olynthe et la guerre d'Eubée* (in *Revue de Philologie,* 1879, pp. 1–13); P. Roussel, *Philippe et les villes de Chalcidique* (see *Revue des Etudes Grecques,* 1935, p. LIII).

[8] *Demosthenes.* From the innumerable monographs dealing with him and his period only a few may be mentioned: A. G. Becker, *Demosthenes als Staatsmann und*

Redner, Halle and Leipzig, 1815, and *Literatur des Demosthenes,* 2 pts., Leipzig, 1830–1834; K. G. Boehnecke, *Demosthenes, Lykurgos, Hypereides und ihr Zeitalter. . . .* (Only vol. I published), Berlin, 1864; E. Bottek, *Dispositive Inhaltsuebersicht zu Demosthenes' acht Staatsreden,* Wien, 1894; G. Grote, *History of Greece* (pt. II, chs. 86–90); S. H. Butcher, *Demosthenes,* London, 1881; L. Brédif, *L'éloquence politique en Grèce,* Paris, 1879; Aug. Boulée, *Histoire de Démosthène,* 2nd ed. Paris, 1867; J. Beloch, *Die attische Politik seit Perikles,* Leipzig, 1884; A. Schaefer, *Demosthenes und seine Zeit* (one of the most important contributions) 2nd ed., Leipzig, 1884–1887; 3 vols.; H. Weil, *Introduction et notices de l'édition des harangues de Démosthène,* Paris, 1873, and *Notices de l'édition des plaidoyers politiques de Démosthène* (2 vols., Paris, 1877–1886); U. Kahrstedt, *Die Politik des Demosthenes* (Diss.) in *Forschungen zur Geschichte des ausgehenden fuenften und des vierten Jahrhunderts* (Berlin, 1910), pp. 1–154; E. Pokorny, *Studien zur griechischen Geschichte im sechsten und fuenften Jahrzehnt des vierten Jahrhunderts v. Chr.* (Diss. Greifswald, 1913); A. W. Pickard, Cambridge, *Demosthenes and the last days of Greek Freedom,* London and New York, 1914; H. Francotte, *Etudes sur Démosthène* (in two series in *Musée Belge,* 1913, pp. 69–90, 237–278, and 1914, pp. 157–188); M. Croiset, *Introduction et notices de l'édition des harangues de Démosthène dans la collection Budé,* 2 vols., Paris, 1924–1925; E. Drerup, *Aus einer alten Advokatenrepublik* and *Demosthenes im Urteil des Altertums* (in *Studien z. Gesch. d. Altert.,* VIII, Heft 3/4, XII, Heft 1/2; Paderborn, 1912, Wuerzburg, 1923); P. Cloché, *La politique de Démosthènes de 354 à 346 av. J.-C.* and *La Grèce de 346 à 339 av. J.-C.* (in *Bulletin de Correspondence Hellénique,* 1923, pp. 97–162, and *ibidem,* 1920, pp. 108–159) and also *La politique étrangère d'Athènes de 404 à 338 avant J.-C.,* Paris, 1934, and finally *Démosthènes et la fin de la démocratie Athénienne,* Paris, 1937; J. van Ooteghem, *La politique de Démosthène* (in *Revue Belge de Philologie et d'Histoire,* 1928, pp. 913–955); F. Focke, *Demosthenes-Studien* (Einzelausgabe aus *Genathliakon Wilhelm Schmid* in *Tuebinger Beitraege zur Altertumswissenschaft,* Heft 5, Stuttgart, 1929); P. Treves, *Demostene e la libertà Greca,* Bari, 1933; G. Glotz, *La Grèce au IVe siècle,* Paris, 1936. Of recent works transcending the purely historical and philological scope the following may be mentioned: G. Clémenceau, *Démosthène,* Paris, 1926 (in spite of many inaccuracies a magnificently intuitive treatise); C. D. Adams, *Demosthenes and his influence,* New York, 1927 (the only serious recent attempt in English literature on the subject); W. Jaeger, *Demosthenes, the Origin and Growth of His Policy* (transl. E. S. Robinson, Berkeley, 1938); although not drawing on the most recent publications of Cloché, Glotz, and Treves, this work is a most important attempt to reappraise the conceptions of Demosthenes with the aid of other than purely factual materials.

[9] Aeschines. Compare A. Bougot, *La Rivalité d'Eschine et de Démosthène,* Paris, 1891; V. Martin and G. Budé, *Introduction et notices de l'édition d'Eschine,* (Budé collection; 2 vols.; Paris, 1927–1928).

[10] See, for literature, n. 8 and any general account of Greek history.

[11] Although accessible by land routes, Macedonia in the eyes of the average Athenian was an "overseas" country. Every Athenian expedition to these regions went by boat and not overland.

[12] Persia.

[13] Demosthenes, *On the Navy-Boards,* 41; presumably the speech was given in 354 B.C.

[14] Thebes.

[15] Compare Diodorus, XVI, 31, 37, 38, and the allusion in Demosthenes' *First Philippic,* 41. Sparta sent 1000 men, the Achaeans 2000, Athens 5400. Thus the main effort was made by Athens.

[16] Thermopylae. The attempted raid took place in 353 B.C.

[17] Thrace. See on the Athenian relations with this country, Demosthenes, *Against Aristocrates*; on the date of this speech F. Kahle, *De Demosthenis orationum Androtioneae Timocrateae Aristocrateae temporibus* (Diss. Goettingen, 1909) and H. Francotte, *Le discours contre Aristocrates* (Study no. III in the first series of his *Etudes sur Démosthène* cit. in n. 8 in *Musée Belge,* 1913). See also Demosthenes, *First Philippic,* 35, and *First Olynthiac,* 9 and 12, and Diodorus, XVI, 31, 34. Of modern works the following may be mentioned: A. Hoeck, *Ueber den thrakischen Fuersten Ketriporis* (in *Jahrbuecher fuer klassische Philologie,* 1877, pp. 836 ff.), and *Die Soehne des Kersobleptes von Thrakien* (in Hermes, 1897, pp. 626 ff.), also *Das Odrysenreich in Thrakien im fuenften und vierten Jahrhundert v. Chr.* and *Der Odrysenkoenig Hebrytelmis* (both in *Hermes,* 1891, pp. 76–117, and 453–462); P. Foucart, *Les Athéniens dans la Chersonèse de Thrace au IVe siècle* (in *Mémoires de l'Académie des Inscriptions,* XXXVIII, 2e partie (1909), pp. 83–120); P. Cloché, *Le traité athéno-thrace de 357 av. J.-C.* (in *Revue de Philologie,* 1922, pp. 5–13) and *Athènes et Kersebleptès de 357–356 à 353–352* (in Mélanges Glotz, I, pp. 215–226; Paris, 1932).

[18] Used for the Athenian *ecclesia,* though it was not a representative body, but the direct sum total of the voting citizens (in theory).

[19] Rhodes.

[20] King Mausolos had aided the Rhodians when they revolted against the Athenian hegemony. In 355 they had achieved independence, only to lose it to Mausolos (after his death his widow Artemisia succeeded him in 353 B.C.). Behind them, as Demosthenes' speech *For the liberty of the Rhodians* shows, loomed the Persian king.

[21] Demosthenes, *op. cit.,* 6–8.

[22] Demosthenes, *op. cit.,* 3–5. The speech was probably delivered in 351 B.C. On the motives compare W. Jaeger, *op. cit.,* in n. 8, p. 94.

[23] Demosthenes, *op. cit.,* 16, 20–21.

[24] Two schools of thought have agreed that Demosthenes has always retained his original political convictions, the one making him an unwavering friend of the common people from the beginning, the other concentrating on his small-town particularism (see for instance A. Momigliano in *Civiltà Moderna,* 1931, pp. 711 ff.). Against this narrow conception see P. Treves in *Rivista di Filologia,* 1932, pp. 68 ff. A more recent appraisal ascribes to Demosthenes a gradual rise from particularist to Pan-hellenic views. The movement away from isolationism can be interpreted as proof for this theory; compare W. Jaeger, *op. cit.,* in n. 8, pp. 171 ff. The spiritual leader of Pan-hellenism under whose influence Demosthenes must have come—at least to some extent—was Isocrates, whose *Panegyrikos* and *Panathenaikos* embodied the conception of Pan-hellenic organization under Athenian leadership. For this and the later turn of Isocrates toward Philip, in whom he began to see the god-sent

redeemer of Greece from the curse of particularism, see, for example, G. Mathieu, *Les idées politiques d'Isocrate,* Paris, 1925; and *Isocrate, Philippe et lettres à Philippe, à Alexandre et à Antipatros,* Paris, 1924; P. Treves, *Isocrate. A Filippo,* Milan, 1933; see also P. Wendland, *Beitraege zur athenischen Politik und Publizistik des vierten Jahrhunderts,* no. 2: *Isokrates und Demosthenes* (in *Nachrichten von der Kgl. Gesellschaft der Wissenschaften zu Goettingen,* Philologisch-historische Klasse, 1910, pp. 289 ff.); on Isocrates see also W. Jaeger, *op. cit.,* pp. 150 ff.; and pp. 255–256, n. 41–44.

[25] Demosthenes, *For the liberty of the Rhodians,* 31–32.

[26] Compare P. Cloché, *La politique étrangère,* etc. (cited in n. 8), p. 188, on earlier isolationist resistance, and p. 200: "As in 353–352, the opponents of intervention triumphed." How completely anti-Rhodian Athenian policy continued, see Diodorus, VI, 42. On the failure of Demosthenes's speech see also, U. Kahrstedt, *op. cit.* in n. 8, p. 117, and E. Pokorney, *op. cit.* in n. 8, pp. 107–108; also for the general strength of isolationism and the class from which its backers were recruited, compare W. Jaeger, *op. cit.,* p. 91: "Eubulos and the other heads of the wealthy citizens' group have taken their stand firmly on the principle of non-intervention."

[27] Demosthenes, *For the liberty of the Rhodians,* 24. The general hostility against Philip to which he alluded in an earlier speech (*Against Aristocrates,* f. 659; compare also f. 656 and 660) is of a different nature. It is the sentiment (so frequent in Athenian history) of hostility towards a momentary enemy, and quite different from the permanent conviction growing in Demosthenes that Philip of Macedonia was not *a* but *the* enemy of Athens and everything Athenian democracy stood for.

[28] In this connection the brief speech of Demosthenes (or more probably of one of his partisans) might be mentioned which dealt with purely financial matters: *On organization*; the date of its publication is hotly contested; compare for instance H. Francotte, *Etudes sur Démosthène,* no. IV: *La date du discours de Démosthène* περὶ Συντάξεως (in *Musée Belge,* 1913, pp. 271–278). He dates the speech from 353–52; F. Focke (*op. cit.,* in n. 8, pp. 12 ff.) and W. Jaeger (*op. cit.,* p. 242, n. 24) prefer 351 B.C.; J. Heimer (*De Demosthenis* XIII (Diss.), Muenster, 1912) favors 350 B.C., while F. W. Levy (*De Demosthenis* περὶ Συντάξεως *oratione,* Diss., Berlin, 1919) puts the date later than the *Third Olynthiac, i.e.,* around 348 B.C. Similarly contested is the authenticity of the text, but this problem does not enter into the scope of the present study.

[29] Philip had not only captured Athenians at Lemnos and Imbros, but also had stopped Athenian ships at Geraestus. As a crowning insult he had captured the unarmed ship, the *Paralus,* when it had stopped at the historic village of Marathon on its annual pilgrimage to Delos; see Demosthenes, *First Philippic,* 34.

[30] Demosthenes, *op. cit.,* 1; compare on the Philippics A. Puech, *Les Philippiques de Démosthène,* Paris, 1929. On the first Philippic (the date of which is also contested but falls probably into 351 B.C.) see E. Schwartz, *Demosthenes erste Philippika* (in *Festschrift Theodor Mommsen zum fuenfzigjaehrigen Doktorjubilaeum,* Marburg, 1893).

[31] He preferred—in 322 B.C.—suicide in Poseidon's temple at Kalauria to arrest (and probable death) at the hands of Antipater's henchmen.

[32] Demosthenes, *For the liberty of the Rhodians,* 21.

[33] Demosthenes, *First Philippic*, 1–11.

[34] Demosthenes, *op. cit.*, 42–43.

[35] Demosthenes, *op. cit.*, 49–50.

[36] The failure is generally admitted. Its cause might be deduced from the unwillingness of the well-to-do to bring the sacrifices necessary for the proposed program of military reorganization. In a dreadfully prophetic comment on this attitude G. Clémenceau, *Démosthène*, pp. 65–66, concludes "When a nation abandons herself, there is no magician who could save her." Compare with this the verdict of J. Beloch (a typical nineteenth-century German attitude) "The whole plan amounted to a useless drain of the public treasury; fortunately it did not pass" (*op. cit.* in n. 8, p. 186).

[37] For a summary of Philip's activities see Demosthenes, *First Philippic*, 4–5, 35, also *First Olynthiac*, 12 and 13, 22 (the latter on some temporary Thessalian resistance; compare on Thessaly's role in this era H. D. Westlake, *Thessaly in the fourth century B.C.*, London, 1935, and P. Foucart, *Démosthène et les hieromnemons thessaliens* (in *Revue de Philologie*, 1899, pp. 105–111). On Philip's very modern technique of conquest see Demosthenes, *Second Olynthiac*, 6 and 7, also 14, and *Third Olynthiac*, 4 and 8; compare G. Glotz, *Philippe et la surprise d'Elatée* (in *Bulletin de Correspondence Hellénique*, 1909, pp. 526–546).

[38] Olynthus; for literature see n. 7.

[39] Demosthenes, *Third Philippic*, 56–57, 64–66. *On the false embassy*, 265–267, 295. The parallel with present-day fifth-column tactics is incredible; compare M. Gude, *op. cit.* in n. 7, p. 33.

[40] Demosthenes, *First Olynthiac*, 2–4.

[41] Demosthenes, *op. cit.*, 5–6.

[42] Amphipolis, Pydna, Potidaea, Methone, Thessaly.

[42a] Thrace.

[43] Demosthenes, *op. cit.*, 8–9, 12–13.

[44] Demosthenes, *op. cit.*, 15, 21, 23–24.

[45] Demosthenes, *op. cit.*, 25–28.

[46] Compare *Inscriptiones Graecae, editio minor*, II (1913), no. 207.

[47] This is rightly assumed by P. Cloché, *Démosthènes*, etc., p. 81.

[47a] Athenian Expeditionary Force.

[48] In spite of Philochoros (fr. 132 in *Fragm. Hist. Gr.*, ed. Mueller, I, p. 405), who asserts that the force was actually despatched, M. Croiset (*Démosthène, Harangues*, etc., I, pp. 89–91, 121) is probably right in assuming that it sailed only after the third Olynthiac.

[49] Demosthenes, *Second Olynthiac*, 1–2.

[50] The more conservative Loeb edition calls them *household troops and footguards.*

[51] Demosthenes, *op. cit.*, 5, 7–9, 15–18, 20–21.

[52] "Syndicates" occurs in the Loeb edition instead of "lobbies."

[53] Demosthenes, *op. cit.*, 22–23, 29–30.

[54] Athenian Expeditionary Force.

[55] Compare n. 48. The general was Chares; see J. Kirchner, *Chares* (in *Pauly-Wissowa's Realenzyklopaedie*, III (1899), col. 2125–2128).

[56] Charidemos; compare Philochoros, fr. 132 (ed. Mueller I, 9, p. 735, 3 in *Fragm. Hist. Gr.* under Dionysius of Halicarnassus, *Ep. ad Amm.*) and see J. Kirchner, *Charidemos* (as in n. 56, col. 2135–2138).

[57] The theoric fund fulfilled the functions of modern relief funds to such an extent that it is necessary to use the modern term in order to convey to the reader an impression similar to the reaction of the Athenian audience when it heard Demosthenes's plan to restrict sharply the theoric fund; compare H. Francotte, *Démosthène et le théôrique* (no. 1 of the *Etudes sur Démosthène* in *Musée Belge*, 1913, pp. 69–90); J. van Ooteghem, *Démosthène et le théôricon* (in *Les Etudes Classiques*, 1932, pp. 388–407); compare also G. Glotz, *Démosthène et les finances athéniennes de 346 à 339* (in *Revue Historique*, 1932, pp. 3–15) and W. Jaeger, *op. cit.*, pp. 139 ff., 243–244, n. 34–38.

[58] The literature is in complete agreement on this point.

[59] Demosthenes, *Third Olynthiac*, 10–11, 19.

[60] Demosthenes, *op. cit.*, 2–3, 6–9.

[61] Compare n. 46, 47, 57.

[62] See on this P. Cloché, *Démosthènes* etc., p. 90. Even the special war tax did not furnish adequate returns. Whether or not further reduction of the theoric fund was feasible after 346 B.C. is controversial. G. Glotz (*op. cit.* in n. 58, pp. 13–14) is doubtful. The fact that the financial sinews of war remained weak is—at any rate—generally conceded.

[63] Compare Philochoros (fr. 132 in *Fragm. Hist. Gr.*, ed. Mueller, I, 9, p. 735, 14, under Dion. Hal., *Ep. ad Amm.*).

[64] Diodorus, XVI, 52–53; compare Demosthenes, *Third Philippic*, 56.

[65] Diodorus, XVI, 53; see also Demosthenes, *Third Philippic*, 26 on the complete devastation of the region effected by the annihilation of thirty-two other towns besides Olynthus; see also *op. cit.*, 66.

[66] Eubulos, the outstanding leader of the isolationist Athenian appeasement faction, joined at this occasion with his political opponents in moving that special embassies should be sent to rally the Peloponnesian states to common resistance against the Macedonian menace; compare Demosthenes, *On the false embassy*, 304. His henchman Aeschines not only went south as one of the envoys, but also voiced strong anti-Macedonian sentiments, confessing to being moved to tears when meeting a large group of Olythians as slaves trudging along the road he travelled; see Demosthenes, *op. cit.*, 10, 302–306 and Aeschines, *On the embassy*, 79.

[67] The new era was fittingly inaugurated in 348 B.C. by the same Philocrates who five years later was convicted of having been in Philip's pay and fled into exile; compare Demosthenes, *On the false embassy*, 114–116, 245; Aeschines, *Against Ctesiphon*, 79. In 348 Philocrates moved that peace negotiations be entered into with Philip. Lycinus, an Athenian patriot immediately brought action against Philocrates for having brought in an illegal motion. No less a patriot than Demosthenes sullied himself by defending the rascal, Demosthenes of all men! He who sacrificed at about the same time a considerable amount of his money to ransom Olynthians from the clutches of Philip; compare on these matters Demosthenes, *On the false embassy*, 169–171, 291–292, and on his later feelings with regard to Philocrates *op. cit.*, 114–117; see furthermore Aeschines, *On the embassy*, 13–14, 18–19, and *Against Ctesiphon*, 62–63.

[68] Aeschines, *On the embassy*, 79; Demosthenes, *On the crown*, 20.

[69] The Peloponnesian states.

[70] Apart from n. 6 and 9, see for the previous life and career of Aeschines, Demosthenes' merciless sketch (*On the crown*, 129–131; 258–266; *On the false em-*

bassy, 78–79, 200, 237, 246–250, 336–337) and Aeschines, *On the embassy,* 147–152, 74–77, and *Against Ctesiphon* 148–152, the latter two passages testifying to Aeschines' strong dislike for the Athenian diehards whom he classified as antidemocratic revolutionaries (amongst whom he included Demosthenes).

[71] Aeschines, *On the embassy,* 34–35; on the event itself see the whole passage, 20–40.

[72] Philip had (even before the Athenian plans for an embassy had ripened) through some middlemen, especially the actor Aristodemos, ventilated some of his terms; compare Demosthenes, *On the false embassy,* 12, 315–316; Aeschines, *On the embassy,* 12 ff., especially 17.

[73] Aeschines, *Against Ctesiphon,* 65, 68, 71–72; Demosthenes, *On the false embassy,* 159.

[74] See Aeschines, *On the embassy,* 55. On the arrival of the envoys *cf.* Demosthenes, *On the false embassy,* 15, 120.

[75] Compare n. 67.

[76] Philocrates, Aeschines, and Demosthenes seem to have been the main defenders of the peace-terms brought home by the embassy to which they themselves had belonged; compare Demosthenes, *On the false embassy,* 15–16, 150, 307, 311 ff., and Aeschines, *Against Ctesiphon,* 65 ff., on the general conditions as seen through the eyes of the appeaser Aeschines at the time of the "parliamentary" deliberations on the peace see his account in *On the embassy,* 70 ff.; compare also *idem,* 53–65.

[77] This much can be inferred from Aeschines's biased account in *On the embassy,* 62, and explicitly stated though misinterpreted, *op. cit.,* 71–72.

[78] According to Demosthenes (*On the false embassy,* 159) Philocrates in his motion's text excluded the Phocians and the citizens of Halos from the peace treaty. On the change insisted upon by the assembly, a change in favor of the allies' inclusion in the contemplated peace-treaty, see *op. cit.,* 161; more vague is the mention of Aeschines, *Against Ctesiphon,* 54.

[79] Even the last-mentioned passage of Aeschines might be interpreted in this fashion. Also it is unlikely that Demosthenes would have stressed the change in his speech three years later, unless he had at least not contradicted the alteration of Philocrates' motion.

[80] The two embassies consisted of Demosthenes (probably the youngest member) Philocrates, Aeschines, Iatrocles, Aristodemos (the actor mentioned above in n. 75), Ctesiphon, Phrynon, Nausicles, Cimon, Derkylos, and Aglaocreon of Tenedos for the Athenian allies; see Demosthenes, *On the false embassy,* 12–18, 189, 229; Aeschines, *On the embassy,* 8, 12–13, 18, 20–21, 42, 47–48, 52, 184.

[81] Compare Demosthenes, *On the false embassy,* 18. Kersobleptes of Thrace and the Phocians were the two allies most exposed to Mr. X.'s expansionist policies. For the incredible blindness of Aeschines in the face of Philip's grim military preparations, see the typical "peace, not force" speech which Aeschines boasts of having delivered in the presence of Philip, extending to him a thinly veiled invitation to come into central Greece as a peace-maker; see Aeschines, *On the embassy,* 113–119.

[82] Compare Demosthenes, *On the false embassy,* 156; Aeschines, *On the embassy,* 97.

[83] Demosthenes, *op. cit.,* 154–156; compare also *On the crown,* 25–27; Aeschines, *On the embassy,* 91–92.

[84] See Aeschines, *op. cit.,* 90 and 92.

[85] Demosthenes, *On the false embassy,* 43–45, 174.

[86] Pherae in Thessaly; see Demosthenes, *ibidem,* 158; (175 for a curious sidelight).

[87] Delphi; for the straining of the relations between the Phocians and Athens compare Demosthenes, *ibidem,* 50 ff., 322, 155. For the demand to surrender Delphi see *ibidem,* 49.

[88] Thermopylae; see Demosthenes, *ibidem,* 125; for his own attitude see also *Second Philippic,* 29–30.

[89] Demosthenes, *On the false embassy,* 121 ff.; he declined to participate in this embassy; compare Aeschines, *On the embassy,* 94, 139.

[90] The third embassy had returned immediately to Athens upon hearing of the Phocian disaster. A fourth embassy was then dispatched. Aeschines who had pleaded illness to escape serving on the third one now went to Philip (Demosthenes, *On the false embassy,* 126 ff.). The feeble Athenian protest against Philip's staggering blow was the refusal to participate at the Pythian games. No member of the Athenian council attended, nor did any Athenian serve as an umpire; see Demosthenes, *ibidem,* 128–129.

[91] Timarchus.

[92] Aeschines, *Against Timarchus,* 4–5. The entire sequence 4–32 furnishes one of the most interesting bits of information on Athenian school conditions and on Athenian "morals-legislation."

[93] Aeschines, *ibidem,* 9. Inasmuch as Aeschines's father had been an elementary schoolteacher, Aeschines was particularly familiar with these conditions; compare Demosthenes, *On the crown,* 129, 258–259.

[94] The "professor" alluded to is Socrates, his rebel disciple Critias, the leader of the "thirty-tyrants government" imposed on Athens after her defeat in the Peloponnesian war in 404 B.C.

[95] Philocrates.

[96] Aeschines, *op. cit.,* 173.

[97] 343 B.C., five years before the fateful day of Chaeronea, the main suit against Aeschines was brought to trial.

[98] In 344 B.C. Demosthenes reviewed the negative results in his *Second Philippic,* 18 ff., especially 26; on Philip's activities outside the Peloponnese see also *On the false embassy,* 294–295,—compare *On the crown,* 295.

[99] See Demosthenes, *ibid.,* 19. For the somewhat greater success of a similar campaign in 342 B.C. compare Demosthenes, *Third Philippic,* 72.

[100] Compare on this P. Cloché, *Démosthènes . . .* , p. 124, especially the inscriptions cited in n. 3.

[101] The five preceding citations from *Second Philippic,* 5–8, 10, 16, 18–19, 24–25, 28–30, 32–36.

[102] The six preceding citations from *Third Philippic,* 1–2, 8–9, 10–15, 21–22, 27–39, 33–40.

[103] Thebes joined Athens in 339 B.C., one year after the outbreak of the war.

[104] *Third Philippic,* 47–51.

[105] *Op. cit.,* 67–68, 70.

[106] *Op. cit.,* 71, 73–4.

[107] Philip's letter, 18–19. A probably accurate though not *verbatim* version of the lost original.

[108] From the same, 23.

DISCUSSION

A PROBLEM IN THE HISTORY OF IDEAS

By Frederick J. Teggart

In his prefatory "Reflections on the History of Ideas" the editor points out that one of the aims of the *Journal* is the promotion of "mutual criticism and mutual aid" among those who pursue the study of intellectual history. I accept this definition of policy as warrant for calling attention to the stress which the writer has placed upon "the oscillatory character of much of the history of thought" (20). That a particular interpretation of historical phenomena should be given prominence at the inauguration of this new enterprise, and should be further emphasized by the declaration that "no honest observer . . . can deny" its applicability to the subject under consideration, is a matter of utmost concern for the future of a highly significant branch of scholarship. When an editor speaks in an authoritative manner, it is to be anticipated that prospective contributors, seeking for guidance and looking for approval, will adopt the commended interpretation, and as a consequence will overlook the necessity of comparing it with others current at the present time.

The use of the term "oscillation" to describe the movement of change in ideas is not without support in recent literature. Bertrand Russell, for example, devotes a chapter of his *Sceptical Essays* (1928) to consideration of "the oscillation from synthesis and intolerance to analysis and tolerance, and back again," and is of opinion that "various periodic oscillations run through the history of mankind" (219). The theory has, indeed, been accorded wide recognition since Pareto published his *Sociology* in 1916. In this work the author speaks of oscillations observable during many centuries "between scepticism and faith, materialism and idealism, logico-experimental science and metaphysics" (§1680); he thinks that to write the history of oscillations in ideas would be to write the history of human thought (§2329); he asserts that the human mind oscillates between two extremes of opinion, and, being unable to halt at either, continues in movement indefinitely (§2342). The description which Professor Lovejoy gives of the view he has adopted is that "on any intelligibly formulable general question, there are usually two not entirely unplausible extreme positions, with a number of intermediate ones; and much of the historic spectacle, so far as the dominant tendencies of successive periods are concerned, seems to consist in alternate shifts from one extreme to the other, either abruptly or gradually through the intermediate stages" (20).

The general statement which has just been quoted is followed at once by the remark that "the phenomenon is, of course, especially conspicuous in

political and social history." Pareto also brings changes in ideas into juxtaposition with political phenomena. Thus he observes that "in history a period of faith will be followed by a period of scepticism, which will in turn be followed by another period of faith, and this by another period of scepticism, and so on" (§2341). He then declares that oscillations in ideas are consequences of social movements, and so infers that the "alternating periods of faith and scepticism have to be correlated with other facts" (§2343). His next step—and it is to be remembered that Pareto was a professor of economics—is to say that "the oscillations we are trying to understand are like oscillations in the economic field" (§2344). If now we consider the formula in use by economists—depression followed by revival, revival by prosperity, prosperity by crisis, crisis by depression again, in continuous round—it will be recognized that the pattern underlying Pareto's argument is that of the "business cycle." So, too, the increasing awareness of oscillations in ideas which Professor Lovejoy postulates would seem to be another expression of the extent to which the imagery of economics has imposed itself on the thought of the moment.

Confidence in the graphic representation of undulations, fluctuations, and cycles is a definite phase of contemporary mentality. There will be many, therefore, to agree with Pareto that the effort required for an investigation of the history of oscillatory theories "could much more profitably be devoted to objective study of the phenomena themselves, . . . along with a search for measurable indices for the phenomena and for a classification of fluctuations in order of intensity, with the object, if possible, of determining what the major oscillations are, and of discovering a few of the very numerous correlations prevailing between oscillations in different phenomena" (§2330). The policy advocated by Pareto is, then, that we should accept his program and go to work. The plan cannot, however, be endorsed by the student of intellectual history, for the special activity to which he is committed is just that of inquiring into the history of theories and patterns of thought. He might rather be expected to wonder at the emphasis placed, in 1940, on our awareness of oscillations in thought, when Aristotle, twenty-two or three centuries ago, had remarked that "the same opinions appear in cycles among men not once or twice, but infinitely often" (*Meteorologia* I. 339b; *De Caelo* I. 270b; *Metaphysics* XII. 1074b). And he might be expected to wonder at the current interest in a type of cyclic movement for which Machiavelli, at the beginning of the sixteenth century, provided the pattern in his *Florentine History:* "States," he said, "will always be falling from prosperity to adversity, and from adversity they will ascend again to prosperity. Because valor brings peace, peace idleness, idleness disorder, and disorder ruin; once more from ruin arises good order, from order valor, and from valor success and glory."

The phenomenon of oscillation, Professor Lovejoy thinks, is especially

conspicuous in political and social history; in his opinion the succession of absolute monarchy, democracy, and dictatorship "seems to be the all-but universal pattern of the sequences of politico-social history," and in confirmation of this opinion he argues that political history, "as Polybius long since observed, . . . [has much] the look of a series of periodic recurrences." It would appear, therefore, that in the field of intellectual history the inquirer may, without further question, accept the views of a political historian concerning the course of change in forms of government as a standard by which to judge the course of change in ideas. Such being the case, it is essential to notice that in the opinion of Polybius "every body or state or action has its natural periods first of growth, then of prime, and finally of decay" (vi. 51. 4), and that the cycle of change in political organization is "the course appointed by nature in which constitutions change, decline, and finally return to the point from which they started" (vi. 9. 10).

Professor Lovejoy mentions the "recurrences" of Polybius with approval, but without making reference to the reliance which that writer placed upon the conception of the "life cycle." It is of interest, therefore, to notice that other writers of recent years who have accepted the theory of "recurrences" have even been at pains to disclaim any dependence upon the analogy. To take an example, Dean Inge, in the *Outspoken Essays* published in 1922, was emphatic in saying that "this doctrine of recurrence is not popular to-day; but," he continued, "whether we like it or not, no other view of the macrocosm is even tenable" (160), and he referred to Goethe, Nietzsche, Kierkegaard, and Shelley as among those who adhered to this belief. Three years later (1925), however, he found it necessary, seemingly in response to critics, to speak of "the notion that civilizations grow old and die like individuals" as untenable, and went on to say that "there is no valid analogy between the life of an organism and that of society"—yet in the same article he continued to employ the analogy in discussing the rise and fall of nations. Pareto found himself in a similar difficulty. In a particular passage (§2330) he gave it as his opinion that the theories of Dr. Draper (*History of the Intellectual Development of Europe*, 1864) "come very close to experimental realities." Draper had separated the intellectual progress of Europe, "like that of an individual," into five periods: the ages of credulity, inquiry, faith, reason, and decrepitude. In a second passage, after quoting Draper's statement about these "ages," Pareto (§2341 note) professed that the author "clearly had an intuitive perception of one of our wide oscillations," but then went on to say that he had let himself be "led astray by a mistaken analogy." The fact is, however, that Draper was a physiologist who, later in life, became interested in intellectual history; and if he arrived at one of Pareto's major oscillations, it was through "tracing analogies," as he himself says, "between the life of individuals and that of nations." Were Pareto writing now, he might with equal propriety

claim the conceptions of Spengler and of Toynbee as intuitive perceptions of his larger oscillations, but he would again be met by the fact that in these instances also the patterns introduced had been derived from the biological analogy. And in this situation it is worth mentioning that, in the judgment of O. G. S. Crawford (*Antiquity*, 1931, p. 6), "no one except Spengler has brought the wave theory of civilization into relation with the organic concept of society and shown that the two are really inseparable." Pareto assumed that he might adopt the pattern which Draper utilized in his *History* and yet reject the presuppositions upon which the pattern was based. When, however, a theory formulated by an earlier writer is taken over by a later, acceptance of the conclusions reached carries with it of necessity an acceptance of and responsibility for the antecedent steps. The procedure by which a result is obtained is part and parcel of that result. One cannot admit the validity of Bury's contention (*Idea of Progress*, 110) when he speaks of "those truths which were originally established by false reasoning."

Professor Lovejoy approves of the ideas of Polybius concerning "recurrences," but does not refer to the historian's use of analogy. As a consequence he does not find occasion to comment upon the insistence of Polybius on the conception expressed in the terms "the course appointed by nature" and "the natural periods" of growth and decay. Now Polybius was entirely familiar with the idea that each and every form of life has a characteristic "life history," for then as now one recognized activity of biological inquiry was a determination of the changes which a given organism passes through in its development from its primary stage until its natural death. A "life history" is the course which an individual of a given species may be expected to follow, if nothing interferes. The term "life cycle," as distinguished from "life history," applies to the series of stages which the organism exhibits between successive recurrences of its primary stage. Interest in the way things "naturally" grow or develop was prominent in Greek thought. Thus Thucydides (i. 16) held that in all the different localities of Hellas the peoples would have had a similar development if this, in certain cases, had not been interfered with; he thought that certain of the Hellenic peoples had met with obstacles to their natural and continuous growth. The point of view is characteristic of the teaching of Hippocrates. In his judgment the first business of medical science was to determine the course which diseases normally run, so that in each particular case the physician might be in a position to make a prognosis, might be able to tell what was to be expected. In his opinion the aim of the practitioner was to protect the patient against conditions or circumstances which might interfere with the normal course of the disease and of his recovery. The conception of prognosis was adopted by Polybius, as is clear from his remark that "he alone who has seen how each form naturally arises and develops, will be

able to see when, how, and where the growth, perfection, change, and end of each are likely to occur again" (vi. 4. 12, tr. W. R. Paton). Cicero's way of thinking was not dissimilar: "The foundation," he said, "of that political wisdom which is the aim of our whole discourse is an understanding of the regular curving path through which governments travel, in order that, when you know what direction any commonwealth tends to take, you may be able to hold it back or take measures to meet the change" (*Republic* ii. 45, tr. C. W. Keyes).

The type of argument which appears in Polybius and Cicero was made use of by Machiavelli, and at no time since the Renaissance has ceased to influence the thought of Western Europe. It lies back of the "true history" of Locke; the "life of the species" which Rousseau undertook to write "after laying facts aside"; the "natural order of things," which, in all the modern states of Europe, Adam Smith thought had been, "in many respects, entirely inverted"; the "hypothetical history of a single people" which Condorcet regarded as "the golden mean between historical detail and philosophical speculation." The procedure exemplified in these instances was still consciously employed in the earlier part of the nineteenth century. Comte, for example, thought that in dealing with historical information it was necessary, for scientific purposes, to strip off from it whatever is peculiar or irrelevant in order to transfer it from the concrete to the abstract. This is obviously the idea expressed by William Whewell, in his *History of the Inductive Sciences* (1837): "Natural History, when systematically treated, excludes all that is historical, for it classes objects by their permanent and universal properties and has nothing to do with the narration of particular or casual facts." In the twentieth century its presence is evident in the various theories of political and cultural cycles and recurrences which are the latest developments in the long endeavor to enlist Hippocratic prognosis in the service of the State. It will, then, be apparent that "theoretical," "conjectural," "abstract," or "natural" history, as it was spoken of in the eighteenth century, was arrived at by abstraction from the actual chronological history of men and countries; and, further, that "abstract" history is not History as the word is to be understood in the title of the *Journal*. The search for natural, normal, typical sequences of change, whether oscillations, undulations, recurrences, or cycles, is a pursuit inapplicable to the History of Ideas.

In his "Reflections" Professor Lovejoy introduces oscillations and recurrences, not by way of contrast to History, but as providing an alternative to the idea of progress. Thus he opposes "the oscillatory character of much of the history of thought" to the view that "what we chiefly witness in the temporal sequence of beliefs . . . is the working of an immanent dialectic whereby ideas are progressively clarified", and, again, he sets the idea that history has much the "look of a series of periodic recurrences" over against

the notion that it moves continuously in some particular direction. The editor is not the first to place in opposition the idea of recurrences and that of a single series of changes. Aristotle, indeed, remarked that "Empedocles supposes the course of Nature to return upon itself, coming round again periodically to its starting-point; while Anaxagoras makes it move continuously without repeating itself" (*Physics* I. 187a, tr. P. H. Wicksteed). Among others, John Stuart Mill, a century ago, in his *System of Logic* (VI. x. 3) argued that, from the reciprocal action of the circumstances in which men are placed and their efforts to mould and shape these circumstances for themselves, "there must necessarily result either a cycle or a progress"; one of these, he thought, "must be the type to which human affairs must conform." He went on to say that, while Vico conceived the phenomena of human society as going through periodically the same series of changes, later writers—and he has much to say of Comte—"universally adopted the idea of a trajectory or progress in lieu of an orbit or cycle."

There were writers in Mill's period, however, who found the choice between the idea of a cycle and that of a progress less simple than it appeared to him. Not long after the publication of the *Logic* Herbert Spencer expressed the conviction that "the current conception of progress was shifting and indefinite," and set himself, in his essay on "Progress: its Law and Cause" (1857), to demonstrate "what progress was in itself." The undertaking was accorded more elaborate treatment in his *First Principles* (1862), and the point to be observed is that in this later work (ch. 23, §183) the argument led him "to the conclusion that the entire process of things, as displayed in the aggregate of the visible Universe, is analogous to the entire process of things as displayed in the smallest aggregates." In the next paragraph he states his final position, and this is that "the universally co-existent forces of attraction and repulsion . . . produce . . . alternate eras of Evolution and Dissolution. And thus," he continues, "there is suggested the conception of a past during which there have been successive Evolutions analogous to that which is now going on; and a future during which successive other such Evolutions may go on"—presumably to infinity. It is certainly a fact worthy of notice that a distinguished advocate of the idea of progress should, in the last resort, have found himself committed to a theory of recurrences. Singularly enough, the position of Dean Inge is also anomalous. In his discussion of the idea of progress, this writer began by making the emphatic statement in favor of recurrences which has already been quoted, and proceeded to denounce the idea of progress, as he himself says, "unmercifully." Nevertheless, in the course of his essay, he came to the point of saying that humanity has not advanced "except by accumulating knowledge and experience and the instruments of living" (175)—which is just what advocates of the idea take it to mean. Moreover, his conclusion, that "for individuals, the path of progress is always open," renders appropriate allegiance to the Stoic doctrine of

progressio. It might be added that, while Spencer was busy with his "Progress: its Law and Cause," James Martineau had occasion to declare that without a large acquaintance with the history of ideas "the utmost acuteness and depth may waste themselves in reproducing doctrines which have run their cycle, and been forgot."

The examples given, and they might readily be multiplied, suggest strongly that the ideas which Mill regarded as antithetical have displayed a marked tendency to appear in the same literary context and even to maintain themselves in the same mind. It is not remarkable, therefore, that in the published writings of a present-day statesman the thought that "there is a mysterious cycle in human events" should crop up in the midst of an ever-present appeal to the idea of progress. As long ago as the seventeenth century, however, Pascal, who contributed to the formation of the idea of progress in his "Preface to a Treatise on Vacuum," recorded thoughts of a different tenor in his *Pensées:* "Man's nature is not always to advance; it has its advances and retreats" (§354); "Nature acts by progress, *itus et reditus;* it goes and returns, then advances further, then twice as much backwards, then more forward than ever, and so on" (§355). In his note to this passage M. Brunschvieg refers to Herbert Spencer; he would, however, have found a closer resemblance in the writings of Madame Blavatsky.

If the difficulty presented by the association in men's minds of ideas apparently incompatible is to be resolved, this end can be attained only through recourse to the history of ideas. Should one, then, turn to Bury's history of the idea of progress, he would find that the first step in the formulation of a "complete doctrine" of progress consisted in a simple modification of the analogy between the life of mankind and that of a single individual. Pascal (in 1647) had argued that "not only does each individual man progress from day to day in knowledge, but mankind as a whole constantly progresses in proportion as the universe grows older, because the same thing happens in the succession of men in general as in the different ages of a single individual man; so the whole succession of men, throughout the centuries, should be envisaged as the life of a single man who lives forever and learns continually" (*Oeuvres,* 1908, II, 139). Fontenelle (in 1688) likewise utilized the analogy between "the men of all ages and a single man." This man, he says, who has lived from the beginning of the world up to the present, had his infancy and his youth, and is now in his prime; but at this point, Fontenelle continues, the comparison fails, for "the man in question will have no old age . . . he will be ever more and more capable of those things which are suited to his prime," in short, the writer thinks, there will be no end to the growth and development of human wisdom (*Oeuvres,* 1728, II, 134). It may be imagined that in the realm of ideas great oaks do not from trifling acorns grow. Yet even today the author of *Mysticism and Logic,* in discoursing of the idea of progress, makes the endeavor to recapture or possibly to modern-

ize this same mode of thought. "An extra-terrestrial philosopher," he says (106), "who had watched a single youth up to the age of twenty-one and had never come across any other human being, might conclude that it is the nature of human beings to grow continually taller and wiser in an indefinite progress towards perfection." The argument of Fontenelle, it may be added, was introduced as a weapon in a literary controversy, and in opposition to views which one may find correctly, though undesignedly, presented in Santayana's *Soliloquies*.

It appears, then, that in the attempt to arrive at a comprehension of the facts of human experience different intelligent persons at the present time represent change as a movement in a circle—a "life cycle"; in a semicircle, arc, or trajectory—a "life history"; in a series of undulations or waves—a sequence of "life histories"; and in a straight line. Further, it is now evident that these various ways of looking at the historical world issue from the same source—an analogy between the movement or motion perceptible in human affairs and the growth or development of a living being.

The theories of recurrence and progress alike have their ground in the biological analogy. Nevertheless, the influence of the theories has not been the same, for, while the one implies that the natural course of change, if not interfered with, will lead to desirable results, the other calls imperatively for action. On the one hand, as has already been pointed out, an acceptance of the concept of the "natural," held by Hippocrates and employed in the eighteenth century, found expression in the doctrine of *laissez faire*. Condorcet, on the other hand, an apostle of progress, wanted a science, not merely to foresee the future progress of mankind, but to direct and hasten it. Comte, too, based his Positive Philosophy on the idea that "from science comes prevision, from prevision comes action"; and the purpose of his new science was the creation of a new social system. In our own day, John Dewey calls for "a foreseeing and contriving intelligence" to direct our progress, and puts "primary emphasis upon responsibility for intelligence, for the power which foresees, plans and constructs in advance." It is only a step from this position to that of another contemporary who thinks "humanity must take the management of things into its own hands." Moreover, the long way that the advocates of action are prepared to go is aptly illustrated by Whitehead's declaration (*Adventures of Ideas*, 53) that "Progress consists in modifying the laws of nature," and the purpose of this dramatic measure is "that the Republic on Earth may conform to that Society to be discerned ideally by the divination of Wisdom."

It is time, however, to return to the "Reflections" which have incited this commentary, and to ask who is supposed to be referred to when the editor says that "we have become increasingly aware of the oscillatory character of much of the history of thought." The personal pronoun obviously does not apply to those confidently addressed in the words, "Most of us

accept the prosaic fact that the way to make progress is to build on what we have," and so forth. It cannot be intended for the present-day followers of Kant, Hegel, and Marx, of Rousseau and Comte, of Charles Darwin. It certainly does not represent those who still have faith in the Christian conception of history. The pronoun must stand, then, for some of the "intellectual elements of a population" which Pareto disparaged (§2344) rather than for the persons he grouped under "the masses at large." The historian of ideas, however, will not concern himself with either of these groups to the exclusion of the other, though he may show a predilection for the recorded views of the "intellectual elements." Hence the pronoun, far from indicating an increased unanimity of opinion on a matter of importance, actually directs attention to large classes of persons who remain unaffected by or indifferent to the ideas of oscillations, undulations, and cycles. If one were to hazard a parallel to the editor's idea of "increasing awareness," it might be suggested that in recent years popular literature in the United States gives evidence of striking differences of opinion with respect to interpretations of human experience. The fact that these differences of opinion are accentuated may be tested by a moment's reflection on the probable reception in any group should one outspokenly advocate the exact recurrence of social phenomena, the progress of mankind towards perfection, the "economic interpretation" of anything, or the view that events in the world today are in accordance with the conscious designs of Divine Providence.

Earlier in these comments I expressed the opinion that the preference shown by the editor for the theory of oscillations would lead readers and contributors to overlook the existence of other interpretations of history. The remark was not introduced for the purpose of leading up to some alternative view which might be considered preferable, but with the intent of directing attention to the diversities of opinion manifest in the writings of our contemporaries. The remark was, in fact, inspired by the observation (recorded times without number in the history of science) that all advances in knowledge since the time of Thales and Anaximander have been the outcome of inquiries set on foot by the perception of some difficulty, anomaly, or inaccuracy in accepted explanations or explications of phenomena. It had seemed, indeed, when the publication of the *Journal* was announced, that those by whom it was instituted must have been convinced that the present menacing confusion of ideas in the interpretation of human experience not only called for investigation, but created a situation in thought which, under adequate leadership, held promise of new critical and constructive efforts. With this situation and possibility in mind, it was cause for acute distress to find the editor counselling all and sundry that the history of human thought reveals a perpetual swinging of the pendulum between "two not entirely unplausible extreme positions." The motion may be doubted. Three hundred and twenty years ago it was said that "wise

and serious men" are wont to suppose "that in the revolution of time and of the ages of the world the sciences have their ebbs and flows; that at one season they grow and flourish, at another wither and decay, yet in such sort that when they have reached a certain point and condition they can advance no further." But the statement made then in the *Novum Organum* was not given as advice or uttered with approval—it was put forward to describe "by far the greatest obstacle to the advancement of knowledge and to the undertaking of new tasks therein."

The problem to which the title of these comments refers is set by the multitude of opinions expressed at the present time in regard to the meaning and significance of civilization and culture. The comments made have been designed to show that, without the conscious use of the history of ideas as a discipline, we go on generation after generation, not swinging between two extremes, but echoing confusedly the conflicting views which have been accumulated by our predecessors in the course of centuries.

University of California

Editorial Note

Professor Teggart's interesting and learned comment on a single page of the editor's "Reflections on the History of Ideas" in Vol. I, No. 1, is especially welcome as a contribution towards that aim of "mutual criticism and mutual aid" which is not least among the purposes of this journal. In further pursuance of this aim the editor had proposed to comment in turn, in this issue, upon some of Mr. Teggart's observations with which he finds himself in incomplete agreement. To do so adequately, however, would result in devoting too much of the space in a single number to one topic, to the exclusion of other contributions; publication of further discussion of it is therefore deferred to the next volume. But one or two apparent misconceptions of Mr. Teggart about the policy of the journal should be corrected without delay. The journal is not committed to any "particular interpretation of historical phenomena"; nor does the editor, when suggesting any such interpretation, "speak in an authoritative manner"; nor are contributors such timid folk as Mr. Teggart seems to imagine. On the other hand, the editor enjoys (though Mr. Teggart would seem to imply that he should not enjoy) the same freedom of opinion as other contributors; and in the "Reflections," after indicating in the first section the general aims and hopes inspiring the foundation of such a periodical, he proceeded (as was expressly explained) to present "opinions" on certain "currently controverted questions," for which "the writer alone [was] responsible." It is therefore difficult to understand the cause of the apprehensions which Mr. Teggart intimates in his first paragraph; at all events, he, and others, may be assured that they are groundless—and also that, where controversial questions of interpretation and theory are concerned, much is likely to appear in these pages to which no member of the Editorial Board should be presumed to subscribe.

ARTHUR O. LOVEJOY

NOTES AND DOCUMENTS

THE RISE OF ENGLISH NATIONALISM

By Kemp Malone

In the first number of *JHI*, Professor Hans Kohn begins his paper on English nationalism with the statement that "the awakening of a national consciousness in England came, in spite of the insular situation, later than on the continent."[1] He does not tell us just when, in his opinion, this English awakening occurred, but one is justified in concluding that he would not put it earlier than the fourteenth century, for he notes that not until that century "did the English language gradually replace the French in law courts and in official life."[2] His general position seems not unlike that of Wingfield-Stratford, who in his *History of English Patriotism* (1913) says that

> we must regard the Middle Ages as a long period of preparation, in the course of which the obstacles to patriotism were one by one removed, and the seeds sown which were not to burst into flower until the Almighty blew with his winds and scattered the Armada. At the period of the Norman Conquest all circumstances seemed in league to render the very idea [of patriotism] unthinkable. (I, 3, ff.)

Both Kohn and Wingfield-Stratford ignore the vigorous English nationalism of the eleventh century, a nationalism which brought Edward the Confessor to the throne and figured markedly throughout his reign. The foundations of this nationalism had been laid by Alfred the Great in the ninth century. Before Alfred we find a multiplicity of English royal houses, kings who acknowledge the supremacy of the West Saxon *bretwalda* but remain kings in their own right. After Alfred the picture changes: only one royal house remains, and the heirs of Alfred come to call themselves, not kings of the West Saxons, but kings of the English. And with the national king, descendant of the national hero, we get a national language, the King's English, used throughout the country in writings of all kinds, though the local dialects were not given up and have survived to the present day. This national language was, in some sort, itself the creation of King Alfred, who with his own hand brought into being a body of English prose literature and thereby gave prestige to prose-writing in the mother tongue. The story of English nationalism in the eleventh century has been told elsewhere,[3] and I need not repeat it here. It will be enough to point out that, but for this nationalism, the English language could hardly have

[1] *Journal of the History of Ideas*, I (1940), 69.

[2] *Ibid.*—In fact, of course, French lingered for centuries longer in the law courts.

[3] R. W. Chambers, *On the Continuity of English Prose* (London, 1932), pp. lxi–lxxxi.

survived (as such) 300 years of French domination, nor could the English people have made Englishmen of their foreign masters. When Wingfield-Stratford tells us that "the England of Harold hardly deserved to be called a nation at all," and when Kohn states that "the awakening of a national consciousness in England came . . . later than on the continent" (see above), one need only refer them to the historical records which they have ignored.

The Johns Hopkins University

* * *

Announcement: Program of the American Historical Association, Section on Intellectual History*

THE ROMANTIC MOVEMENT IN EUROPE IN THE FIRST HALF OF THE NINETEENTH CENTURY

Monday, December 30, 1940—2 P. M.

Chairman—Carlton J. H. Hayes, Columbia University

The Meaning of Romanticism for the Historian of Ideas

Arthur O. Lovejoy, Johns Hopkins University

The Romantic Counter-Revolution in Germany

Eugene Anderson, The American University

CONCURRENT SESSIONS AT 3 P. M.

Romanticism and the Religious Revival in England: Hoxie N. Fairchild, Hunter College

Chairman—Chester Kirby, Brown University

Discussion: Charles H. Lyttle, The Meadville Theological School; John H. Randall, Columbia University; F. W. Buckler, Oberlin College.

Romanticism and Economic Organization in Germany: Goetz Briefs, Georgetown University

Chairman—Louis L. Snyder, The City College

Discussion: E. J. Knapton, Wheaton College; Felix Gilbert, Institute for Advanced Study; Richard H. Bauer, Mary Washington College.

Romantic Historiography as a Political Force in France: Jacques Barzun, Columbia University

Chairman—J. Salwyn Schapiro, The City College

Discussion: Sherman Kent, Yale University; Edgar Packard Dean, Council on Foreign Relations; Charles H. Van Duzer.

Committee: J. Salwyn Schapiro, The City College; Ross Hoffman, Fordham University; Oscar J. Falnes, New York University; Jacques Barzun, Columbia University; John H. Randall, Columbia University.

* *Place:* Hotel Pennsylvania, New York City.

BOOK REVIEW

DILTHEY ON GERMAN HISTORY AND HISTORIANS

Wilhelm Diltheys Gesammelte Schriften. Bd. XI. Vom Aufgang des Geschichtlichen Bewusstseins. Leipzig u. Berlin: Teubner. 1936. xx, 278 pp.; Bd. XII. Zur Preussischen Geschichte. Ebenda. x, 212 pp.

These two volumes of *Wilhelm Diltheys Gesammelte Schriften,* both edited by Erich Weniger, make easily available to the contemporary reader valuable historical essays contributed by Dilthey in his earlier years to German periodicals. Since he often wrote anonymously or under pseudonyms at this time, the student needs what is now furnished at the end of Volume XII, pp. 208–212, namely, a critical list of Dilthey's early publications from their beginning in 1857 to 1883, the year of his *Einleitung in die Geisteswissenschaften.* Most of the material now reprinted in these two volumes dates from these years, though some items have been added from later manuscripts, hitherto unpublished, as will be noted.

Volume XI bears a title, *Vom Aufgang des geschichtlichen Bewusstseins,* which Dilthey himself applied to an unfinished series of studies devoted to the work of German historians. The title is principally justified by the central section of the volume, on *Deutsche Geschichtschreiber,* which brings together essays, written between 1865 and 1874 on Joh. von Müller, B. G. Niebuhr, F. C. Schlosser, F. C. Dahlmann, and F. von Raumer. To this there is appropriately added a section of shorter pieces written somewhat later by Dilthey from his personal recollection and appreciation of such men as Treitschke, Haym, Mommsen, Schmoller, and the historians of literature Julian Schmidt and Wilhelm Scherer. But the volume also contains two of Dilthey's earliest essays on Johann Georg Hamann and the theologian Carl Immanuel Nitzsch, which would be better placed in Volume IV of the *Gesammelte Schriften,* together with the studies of Schleiermacher, of the young Hegel, and of other philosophers and theologians of the same period in German cultural history.

Volume XII bears the title *Zur Preussischen Geschichte,* and is, on the whole, much more unified in content. To be sure, the opening essay on *Schleiermachers politische Gesinnung und Wirksamkeit,* in its continuity with Dilthey's other studies of that philosopher, again belongs in Volume IV, but it also has an appropriate place here because of its special concern with the politics of the Prussian awakening. There follows a series of five studies, first published in 1872, on Stein, Hardenberg, Wm. von Humboldt, Gneisenau, and Scharnhorst under the collective title *Die Reorganisatoren des Preussischen Staates (1807–1813).* Finally, there is a fairly long study of *Das allgemeine Landrecht,* pieced together from posthumous manuscripts, a study which somewhat more properly belongs with Dilthey's other writ-

ings on the Frederician state, assembled in Volume III of the *Gesammelte Schriften*. Indeed, in the Preface to that volume (p. IX) the editor, Paul Ritter, expresses his regret at not having been able to prepare these manuscripts on the *Landrecht* for publication there.

One reason for this inability lay in the fact that Dilthey himself never finished his draft of this study. It belongs to the latter years of his life, and presents a conspicuous contrast to the more youthful essays which form the bulk of these volumes. The early essays, it will have been noted from the mention of their titles, are in most cases individual portraits. In the course of time, however, Dilthey became more and more absorbed in the problem of understanding "objective mind" in its more-than-individual manifestations. His treatment of the *Landrecht* is a study of this type. It is obviously a philosopher's account and not a jurist's or sociologist's, yet it does go back of individual systems of philosophy, *e.g.* those of Kant and Hegel, to some of the conditioning institutions and collective ways of thought. But, in this study, as in some other late works, Dilthey appears more method-conscious than in the early essays and more weighted down with reflection that knows it has not yet arrived at the envisaged goal. The early essays not only have a more lively charm, but often a more spontaneous fullness and assurance. While Dilthey's attention in them is principally given to personality traits, individual accomplishments, motivating conceptions, and intellectual equipment, he often also—without methodological pretense—offers far glimpses into social and economic conditions, by the concise narration of telling details.

Events today give renewed pertinency and timeliness to many of these essays on the German past, despite their remote-sounding titles. Dilthey was writing about the German national awakening in the time of Napoleon. He was writing about this at a time when Bismarck was welding the German Empire through victories over Austria and France. His sense of continuity with his subject-matter is a fundamental factor in what he writes. And today as we read we do not seem to be altogether out of the orbit of this history. Indeed, a somewhat uncanny light falls, as we read, upon the efforts of the Prussian leaders to reform and reorganize their state after its subjection to Napoleon. In the course of describing the contributions, in turn, of Stein, Hardenberg, von Humboldt, Gneisenau, and Scharnhorst, Dilthey perforce gives us an earlier version of things that we see today: the crumbling of a social order, the frustrating divisions within it ever multiplying intrigues and compromises, the dependence of military organization and strength upon the more general forms of economy, society, and political principle. Perhaps we should even take note of his remark, in the essay on Gneisenau, that while the patriots pressed forward their work of social and military reorganization, the Prussian king put off the test "until the colossal ambition of Napoleon encountered one of those accidents, which seem to

provide that the monstrous and boundless shall not maintain itself on this earth." (Vol. XII, p. 99).

All this about which Dilthey writes is living history for him, and indeed much of it has even a pragmatic function in his thought. In the series on *Deutsche Geschichtschreiber* the longest study is devoted to Friedrich Christoph Schlosser, 1776–1861 (Vol. XI, pp. 104–164). Schlosser, says Dilthey, "was the first German historian who conceived the purpose of history to be the education of the people in a practical philosophy of life." Schlosser's own point of view, derived from the eighteenth-century Enlightenment, was not Dilthey's, but the latter just as truly, if in a more complex way, also sought wisdom of life through history. One particular phase of this quest pervades these essays with a special poignancy for us. It is the struggle of the intellectual liberal to find validity and suitable effectiveness in the world of political realities. Some turn or other of this struggle is witnessed again and again in the lives that Dilthey writes about, and in a perhaps more quiet way it persists as a strain in his own career and constitution. The essay on F. C. Dahlmann, and its account of the weakness in politics of the intellectual liberals in 1848, strikes this sensitive nerve particularly hard. The frustration of a man like Dahlmann can not be strange either to Dilthey or to his readers.

Most of the men Dilthey discusses in these essays—whether scholars, statesmen, or generals—had their decided liberal tendencies and were in one respect or another exponents of a more democratic way of life. But it it necessary to consider the special forms such tendencies took within the distinctive complex of German society. In opening his essay on the Prussian *Landrecht* Dilthey says that the Prussian state required for its very existence "the utmost concentration of its forces. Only if the individual members were prepared to sacrifice their all for the security, unity, power, and welfare of this state (on the German frontier and surrounded as it was by other strong states) could the Frederician state increase and develop." (Vol. XII, p. 131.) As for Austria, it is in an appreciation of the philologist Wilhelm Scherer, a Viennese by birth, that Dilthey quotes the latter's lament: her constructive powers were held down by patriarchal despotism and the Catholic hierarchy, whose concept of education "made a duty of blind faith and unqualified trust in one's superiors." (Vol. XI, p. 241.)

However, a facile use of such summary comments on Prussia and on Austria must be questioned. A study more careful than has been general in America, of the historical components of Central Europe would bring needed understanding to most of us. Many interesting and important phases of such study may be excellently served through these and other essays of Dilthey.

HORACE L. FRIESS

Columbia University

BOOKS RECEIVED

HISTORY OF ART AND LITERATURE

ROMANTICISM IN AMERICA. Papers Contributed to a Symposium held at the Baltimore Museum of Art, May 13–15, 1940. Edited by George Boas. Baltimore: The Johns Hopkins Press, 1940. Pp. xi, 202 and 15 plates. $2.25.—Democratic Bifocalism, by E. F. Goldman; New Patterns of Greatness, by E. P. Spencer; Thomas Cole and the Romantic Landscape, by W. L. Nathan; The Romantic Lady, by R. S. Boas; Books for the Lady Reader, by O. E. Winslow; The Romantic Interior, by R. Gilman; Early American Gothic, by Agnes Addison; The Beethovens of America, by L. Keefer; Romantic Philosophy in America, by G. Boas.

ART: A BRYN MAWR SYMPOSIUM. Bryn Mawr: Lancaster Press, 1940. Pp. xii, 350. The Art-Historian, by Richard Bernheimer; The Archaeologist, by Rhys Carpenter; The Psychologist, by K. Koffka; The Philosopher, by Milton C. Nahm.

UNIVERSITY OF COLORADO STUDIES. Series B. Studies in the Humanities. Vol. I, No. 2. Boulder: University of Colorado Press, 1940. Pp. 117–220. $1.00.—1. *Aspects of the Relations between Philosophy and Literature,* Joseph W. Cohen. 2. *Chaucer's Text-Book of Astronomy; Johannes de Sacrobosco,* Walter B. Veazie. 3. *James Thomson in Central City,* Marjorie L. Reyburn. 4. *Some Notes on the Plays of T. F. Dibdin,* James Sandoe.

AN INDEX TO THE COLUMBIA EDITION OF THE WORKS OF JOHN MILTON. By Frank Allen Patterson assisted by French Rowe Fogle. 2 vols. New York: Columbia University Press, 1940. Pp. xvi, 2141. $12.50.—Can be used also in connection with other editions of Milton's poetry and of much of his prose. It assembles all the important passages containing references to a given idea, and lists significant parallels between Milton's own work and that of important classical and contemporary writers.

THE FRENCH RENAISSANCE. Text for Illustrative Set No. 3, Museum Extension Publications. By Catherine E. Boyd. Division of Museum Extension, Museum of Fine Arts, Boston, 1940. 42 plates, 12″×16½″, with explanatory captions and 52-page text. $5.20.—Foreword by Charles H. McIlwain: "In no period more than the Renaissance, and in no country more than France, do we find more striking illustrations of that interplay between the religious, artistic, social, and political forces that combined to prepare the way for the modern era. This interplay is the fascination and the despair of the historian. Nothing could be more effective in making it all clearer to us than the series of well-selected illustrations given here, accompanied as they are with comment which relates them to the whole life of the time."

MARCEL PROUST AND HIS FRENCH CRITICS. By Douglas W. Alden. Los Angeles: Lymanhouse, 1940. Pp. vii, 259. (Bibliography pp. 171–259).

EPIC SUGGESTION IN THE IMAGERY OF THE WAVERLY NOVELS. By Christabel F. Fiske. New Haven: Yale University Press, 1940. Pp. xxvi, 141. $2.50.—The opinion that the Homeric epic element in Scott's novels had been greatly neglected in criticism in favor of the romantic.

NATURE IN THE GERMAN NOVEL OF THE LATE EIGHTEENTH CENTURY, 1770–1800. By Clifford Lee Hornaday. New York: Columbia University Press, 1940. Columbia University Germanic Studies—New Series, No. 10. Pp. 221. $2.25.—"The German novelists of the eighteenth century were quick to respond to Rousseau's suggestion that the world would be better and man would be happier if truth were sought in nature. This is a scholarly investigation of the ways in which the fiction writers of the period undertook such an approach to nature. The various 'nature attitudes' are considered, and much light is thrown on the sometimes nebulous and inchoate ways in which the mystic union of man and nature was to be effected."

EDMUND BURKE AND HIS KINSMEN. A Study of the Statesman's Financial Integrity and Private Relationships. By Dixon Wecter. Boulder: University of Colorado Press, 1939. University of Colorado Studies. Series B. Studies in Humanities. Vol. I, No. 1. Pp. 113. $1.00.—The purpose of this study is to clarify some of the less familiar aspects of Edmund Burke's biography, chiefly with the help of new material drawn from the private papers of the statesman now preserved in England.

HARDY OF WESSEX. His Life and Literary Career. By Carl J. Weber. New York: Columbia University Press, 1940. Pp. vii, 302. Index. $3.00.—Access to hundreds of Hardy's unpublished letters has aided the biographer "to tell why Thomas Hardy wrote, why he wrote on the subjects he chose, and how his books grew from ideas and emotions and experiences to printed volumes. This is the genetic method."

NEW ENGLAND: INDIAN SUMMER 1865–1915. By Van Wyck Brooks. New York: E. P. Dutton & Co., 1940. Pp. 557. $3.75.—"This book, a sequel of *The Flowering of New England,* is the second of a series in which I hope to sketch the history of American literature." The author adds to this prefatory remark that his plan is to write *The Age of Washington Irving* as the first of the series. Boston, and especially Harvard, are taken to be the literary centers of the intellectual history of New England from the time of the changes brought about by the Civil War—as reflected in the lives of Howells, Henry Adams and the Jameses—to the days of Robert Frost whose "function was to mediate between New England and the rest of the nation."

SOCIAL AND POLITICAL HISTORY

CLASS AND AMERICAN SOCIOLOGY FROM WARD TO ROSS. By Charles Hunt Page. New York: The Dial Press, 1940. Pp. xiv. 319. $3.50.—The theories of social class and amelioration of L. F. Ward, W. G. Sumner, A. W. Small, F. H. Giddings, C. H. Cooley, E. A. Ross, the "Fathers of American Sociology."

THE ENGLISH GOVERNMENT AT WORK, 1327–1336. Edited by James F. Willard and William A. Morris. Cambridge: The Mediaeval Academy of America, 1940. Volume I—Central and Prerogative Administration. Pp. xx, 467. $5.00.—Chapters on a decade of mediaeval English customs by William A. Morris, Theodore F. T. Plucknett, James F. Baldwin, Bertie Wilkinson, J. H. Johnson, Hilda Johnstone, Henry S. Lucas, Albert E. Prince, and Nellie Neilson.

MALARIA AND COLONIZATION IN THE CAROLINA LOW COUNTRY, 1526–1696. By St. Julien Ravenel Childs. Baltimore: The Johns Hopkins Press, 1940. Pp. 292. $5.00.—Number 1 of Series LVIII of The Johns Hopkins University Studies in Historical and Political Science.

BIOGRAPHICAL DICTIONARY OF THE FRANCISCANS IN SPANISH FLORIDA AND CUBA (1528–1841). By Maynard Geiger. Paterson, N. J.: St. Anthony Guild Press, 1940. Franciscan Studies, Vol. XXI. Pp. 140.—The author believes that the histories of Spanish America and of the United States are one-sided, since they make the affairs of government the principal object of their attention. He contends that "a third of Spanish colonial history is missionary history."

HAITI AND THE UNITED STATES, 1714–1938. By Ludwell Lee Montague. Durham, N. C.: Duke University Press, 1940. Pp. viii, 308. $3.00.—The whole course of Haitian-American relations, extending over more than two centuries, is here surveyed for the first time.

JOHN WHITE GEARY. Soldier-Statesman. 1819–1873. By Harry Marlin Tinkcom. Philadelphia: University of Pennsylvania Press, 1940. Pp. vi, 155. $1.75.—"John White Geary was a member of an American profession now extinct. He and his professional brethren were to be found on the far-flung American frontier supervising and directing the adjustment of institutions created in older communities to fit the needs of the new."

REPARATION AT THE PARIS PEACE CONFERENCE. From the Standpoint of the American Delegation. By Philip Mason Burnett. New York: Columbia University Press, 1940. Pp.: Vol. I: xxiv, 1148; Vol. II: 833. $15.00.—A documentary and historical treatment of the reparations negotiations at the Paris Peace Conference of 1919. Some of the material has been published previously, largely in Miller's Diary, but more than half of it is new. The documents have been reproduced and edited in detail, and are accompanied by charts. An historical introduction analyzes the diplomatic issue and describes the economic and legal questions as elements of diplomacy. The personalities involved, the power of public opinion, the nullification of experts' judgment, the origin of the "war guilt" clauses and of the text used to justify the Ruhr occupation of 1923—are all subjected to examination.

HISTORY OF RELIGION, PHILOSOPHY AND SCIENCE

THIRTY THOUSAND GODS BEFORE JEHOVAH. By Henry Binkley Stein. Boston: Meador Publishing Company, 1940. Pp. 154.—A study of primitive and oriental religions before Christianity.

THE ASTRONOMY OF JOHANNES SCOTUS ERIGENA. By Erika von Erhardt-Siebold and Rudolf von Erhardt. Published for Vassar College by the Williams &

Wilkins Co., Baltimore, Md., 1940. Pp. 69. $1.50.—COSMOLOGY IN THE "ANNOTATIONES IN MARCANIUM." More Light on Erigena's Astronomy. By the same authors. Baltimore: Williams & Wilkins Co., 1940. Pp. 45. $1.25.—"The often repeated conviction of the revolutionary heliocentric character of Erigena's astronomy is untenable in view of the great philosopher's cosmological teachings taken as a whole . . . (Erigena's astronomy) should, in the light of certain Greek and Latin conceptual and terminological traditions, receive a different, non-heliocentric interpretation." Plato's *chorus* conception of the dance of the planets with the sun as the leader, and the Greek cyclical conception of the periodicity of all physical and psychical events as well as Pliny's *Naturalis Historia* influenced Erigena's pseudo-heliocentric ideas as found in his *De Divisione Naturae* and in the *Annotations* (evidently Erigena's) of Martianus Capella's *De Nuptiis Philologiæ et Mercurii*.

A CRITICAL EXPOSITION OF THE PHILOSOPHY OF LEIBNIZ. With an Appendix of Leading Passages. By Bertrand Russell. London: George Allen & Unwin, 1937. Pp. xv, 311. $3.00.—This second edition differs from the first only by the addition of a preface in which Russell claims confirmation of his 1900 version of Leibniz's philosophy in Couturat's two works: *La Logique de Leibniz* (1901), *Opuscules et Fragments inédits de Leibniz* (1903).

BISHOP BUTLER. Moralist and Divine. By William J. Norton, Jr. Rutgers University Studies in Philosophy, Number One. New Brunswick: Rutgers University Press, 1940. Pp. xi, 336. $3.75.—"The present work has grown out of an interest in fathoming, to the fullest extent possible, Butler's views on morality. In its present form it represents a comprehensive survey of his philosophy."

BACKGROUND TO MODERN SCIENCE. Ten Lectures at Cambridge, England, arranged by the History of Science Committee. Edited by Joseph Needham and Walter Pagel. New York: Macmillan Co., Cambridge, England: At the University Press, 1940. Pp. xii, 243. $2.00.—The two first chapters treat of "Greek Natural Philosophy and Modern Science," by Francis M. Cornford, and "From Aristotle to Galileo," by Sir William C. Dampier. The remainder describes the chief scientific work of the last forty years by experts in each field: Radio-activity by the late Lord Rutherford, Crystal Physics by W. L. Bragg, Atomic Structure by F. W. Aston, Astronomy by Sir Arthur Eddington, Physiology and Pathology by John A. Ryle, Parasitology and Tropical Medicine by the late G. H. F. Nuttall, Evolution Theory by R. C. Punnett, and Genetics by J. R. S. Haldane.

A HISTORY OF INDIAN PHILOSOPHY. Vol. III. By Surendranath Dasgupta. Cambridge: At The University Press. New York: The Macmillan Company. Pp. xiii, 614. $8.50.—"A comprehensive attempt to trace a continuous history of Indian thought from the earliest times; and, like the earlier volumes, it is based throughout on a direct and first-hand study of all available texts and manuscript sources."

METAPHYSICS IN MODERN TIMES. A Present Day Perspective. D. W. Gotschalk. Chicago: University of Chicago Press, 1940. Pp. ix, 110. $1.50.—"This book aims to give an elementary account of metaphysics in the modern period (1637 ff.). . . . The fourth and final chapter, after discussing leading modern objections to metaphysics, describes the chief values possessed by metaphysics not only today but throughout the whole of its history."

PERIODICALS AND REPRINTS RECEIVED

"Technology and Invention in the Middle Ages," by Lynn White, Jr. *Speculum,* A Journal of Medieval Studies, XV, 2 (April, 1940), 141–159.

"A Case Study in Philosophical Research and Spinoza," by Harry A. Wolfson. *The New Scholasticism,* XIV, 3 (July, 1940), 268–94.—A critique of Dr. Bidney's work, *The Psychology and Ethics of Spinoza,* A Study in the Logic and History of Ideas.

"Nietzsche, Heine und das 19. Jahrhundert," by Arno Carl Coutinho. *PMLA,* LII, 4 (Dec., 1938), 1126–1145.

"Hitler and Richard Wagner," by Peter Viereck. *Common Sense,* VIII (Nov., 1940). Pp. 3–6, and 20–22 (two articles).—Wagner's "philosophical" and political ideas are "perhaps the most important single fountainhead of Nazi ideology." Also "A Defense of Wagner" by Thomas Mann, *ibid.,* Dec., 1940, pp. 11–14. Comment on foregoing articles. Defense of Wagner as artist, but Viereck's account of "the relationships which undeniably exist between the Wagnerian sphere and the National Socialist evil" is accepted by Mann "with very nearly complete approval."

"Books about the Doctor in Physick and Literature." Catalogue VI, Spring 1940. New York: Schuman's. Pp. 84.

"A Critique of the Theory of Sublimation," by Harry B. Levey. *Psychiatry,* II, 2 (May, 1939), 239–270.

"Contractual Allegiance vs. Deferential Allegiance in Visigothic Law," by Floyd Seyward Lear. *Illinois Law Review,* XXXIV, 5 (Jan., 1940), 557–566.

"The Share of the Arts in the Interpretation of History," by R. F. Arragon. *The Pacific Historical Review,* IX, 1 (March, 1940), 53–60.

"The Gentry of Ante-Bellum South Carolina," by Rosser Howard Taylor. *North Carolina Historical Review,* XVII, 2 (April, 1940), 114–131.

"Kant's First Antimony: A Logical Analysis," by Milton Fried. *Mind,* A Quarterly Review of Psychology and Philosophy, XLIX, N.S., No. 194, 204–218.

"The First Explanation of Interference," by I. Bernard Cohen. *American Journal of Physics,* VIII, 2 (April, 1940), 99–106.

"Les origines sociales de l'incrédulité bourgeoise en France," by Bernard Groethuysen. *Studies in Philosophy and Social Science,* VIII, 3 (1939), 362–393.

"Criminal Law in National Socialistic Germany," by Otto Kirchheimer. *Studies in Philosophy and Social Science,* VIII, 3 (1939), 444–463.

"William James and Henry Adams," by Max I. Baym. *New England Quarterly,* X, 4 (1937), 717–742.

CONTENTS OF VOLUME ONE

Articles

	PAGES
Beach, Joseph W.: Reason and Nature in Wordsworth	335–351
Boas, George: The Mona Lisa in the History of Taste	207–224
Brinton, Crane: The National Socialists' Use of Nietzsche	131–150
Chinard, Gilbert: Polybius and the American Constitution	38–58
Cramer, Frederick H.: Isolationism: A Case History	459–493
Doran, Madelaine: The 'Credulity' of the Elizabethans	151–176
Holt, W. Stull: The Idea of Scientific History in America	352–362
Johnson, Francis R.: Gresham College: Precursor of the Royal Society	413–438
Jones, Richard F.: Science and Criticism in the Neo-Classical Age of English Literature	381–412
Kohn, Hans: The Genesis and Character of English Nationalism	69–94
Kraushaar, Otto: Lotze's Influence on the Pragmatism and Practical Philosophy of William James	439–458
Kristeller, Paul O.: The Theory of Immortality in Marsilio Ficino	299–319
Lovejoy, Arthur O.: Reflections on the History of Ideas	3–23
Malone, Kemp: Grundtvig's Philosophy of History	281–298
Mornet, Daniel: L'Idée de Préciosité en France au XVIIe Siècle	225–231
Nicolson, Marjorie: Kepler, the *Somnium*, and John Donne	259–280
Palmer, Robert R.: The National Idea in France before the Revolution	95–111
Randall, John Herman, Jr.: Development of Scientific Method in the School of Padua	177–206
Russell, Bertrand: Byron and the Modern World	24–37
Steiner, Arpad: A Mirror for Scholars of the Baroque	320–334
Wright, Louis B.: The Significance of Religious Writings in the English Renaissance	59–68

Discussions

Cohen, Morris R. and *Smith, Bernard:* On "Forces in American Criticism" 369–374

PAGES

Smith, Bernard and *Cohen, Morris R.:* On "Forces in American Criticism" 369–374
Teggart, F. J. E.: A Problem in the History of Ideas 494–503

NOTES AND DOCUMENTS

Downey, Glanville: Abstract Ideas in the Mosaics of Antioch 112–113
Malone, Kemp: The Rise of English Nationalism 504–505
Rosen, Edward: The Ramus-Rheticus Correspondence 363–368
Wiener, Philip P.: Leibniz's Project of a Public Exhibition of Scientific Inventions 232–240
Zilsel, Edgar: Copernicus and Mechanics 113–118

BOOK REVIEWS

Cohen, Morris R.: Bernard Smith's *Forces in American Criticism* 241–251
Friess, Horace L.: Dilthey on German History and Historians 506–508
Schneider, Herbert W.: Perry Miller's *New England Mind* 119–122
BOOKS RECEIVED 123–128, 252–254, 375–377, 509–511
PERIODICALS AND REPRINTS RECEIVED 255, 378–379, 513
Analytical Index 516–519
Name Index 520–526

ANALYTICAL INDEX TO VOLUME I

Aesthetics, and the history of ideas, 9 ff.; standards in, 207, 396; Mona Lisa in history of, 207–224; values in Lotze, 446 ff.

American: Constitution and influence of classical writers, 38–58; literary history, 369 ff.; philosophy, 439 ff. (v. Pragmatism); historiographers, and idea of scientific history, 352 ff.

Amour-Propre, in Morhof, 324

Anarchism, Nietzsche and, 144, 147

Ancients and Moderns, in English literature, 77, n. 11, 382 ff.

Animals, lower: and man, Ficino on, 315 ff.; beliefs about, in Elizabethan Age, 151 ff.

Anti-Semitism, and Byron, 36; and Nietzsche, 134 ff.

Archaeology, and history of ideas, 112 ff.

Art, Mona Lisa in history of, 207–224; (v. Aesthetics, Criticism)

Astronomy, in Copernicus, 113 ff.; in Kepler, 259 ff.; in Milton, 279; in Ramus, Rheticus, 363 ff.; at Gresham College, 414 ff., 425

Augustinian: Byron as an, 27; theology and Puritanism, 120 ff.

Authoritarianism, in National Socialism, 135 ff.; in Plato and Nietzsche, 137; in 17th century, 384, 411

Baroque, Morhof's mirror for scholars of the, 320–334

Beatific vision, as end of human existence, in Ficino, 304 ff., 309, 311, 313

Biological analogy of race and individual, in theory of history, 283, 286 ff., 494 ff.

Catholicism, and Kepler, 266; (v. Ficino); Gildon on, 400

Causality: v. Logic

Checks and balances, theory of, in American Constitution, classical sources of, 42 ff.

Christianity: and romanticism, 37; and Nietzsche, 137; conception of history in, 135, 137, 139, 141, 164, 177, 281, 286, 292, 306, 502

Christian Science, 352

Classicism: and romanticism, 20; and *préciosité,* 227, 230; Grundtvig's hatred of Roman classics, 283; classical influence in founding fathers, 38 ff.; in French nationalism, 106 ff.; criticism and science in neo-classical English literature, 381–412

Copernicanism, in Galileo and Kepler, 266, 381; Rhamus-Rheticus correspondence, and the 'Little Preface' to *De revolutionibus orbium,* 363–368; and mechanics, 113–118

Cosmic Voyages: in Kepler 259 ff; in Milton, 275 ff.

Credulity, in Elizabethan age, 151–176

Criticism, literary, and the history of ideas, 9–16; in art, 207 ff., 219; literary, and economic forces, 241–251, 369–374; and science in neo-classical English literature, 381–412

Cyclical theory of history, 283, 286 ff., 459, 494 ff.

Darwinism, and American historiography, 354 ff.

Decline of nature: v. Nature

Democracy, Nietzsche on, 134, 138; Shakespeare on, 242; and isolationism in Athens, 459 ff.

Determinism, and Wordsworth, 350; in history (v. Law), 356; James and Lotze on, 442 ff.

Economic forces in American literature and criticism, 241–251, 369–374

Eighteenth Century, phases of history of ideas in, 38–58, 95–111, 381–412

English and French peoples, Grundtvig on, 296 ff., (v. Nationalism)

Euphuism, and *préciosité,* 225

Evolution, 499 (v. Cyclical, Progress, Nature)

Federal system, American, and classical models and theorists, 53 ff.
Fictionalism, in astronomy of Ramus, 363; of Copernicus, 363–367; of Rheticus, 368
Fifteenth Century, phases of history of ideas in, 59–68, 299–319
Freedom, of teaching and thought in Venice and Padua, 184; in poetry, 398
French, and English peoples, Grundtvig on, 296 ff.; Revolution and nationalism, 95–111
Freudianism, in art criticism, 220 ff.; in literary criticism, 241, 371

God, conception of, in Ficino, 305 ff.; in Nietzsche, 28, 140; in Lotze and James, 456
Golden Age, in Grundtvig, 293

Historiography: "scientific," in America, 352–362; influence of German, on American historians, 359 ff.
History: of ideas, reflections on, 3–23; some problems of, 131, 459, 494 ff.; Nietzsche's essay on, 148; Grundtvig's philosophy of, 281–298; Lotze's and James's philosophy of, 455
"Humanism" (in various senses), and literary history, 14; in Grundtvig, 283 ff.; in Italy, 320 ff.; in Germany, 321 ff.; and rationalism, 341 ff.; and Wordsworth, 343 ff.; and science, 178 ff., 397
Humanitarianism, and Nietzsche, 138

Ideas, reflections on history of, 1–23, 494 ff.; abstract, in Antioch mosaics, 112–113 (v. History of Ideas)
Immortality, in Ficino, 299–319
Individualism, and Nietzsche, 138; in James's philosophy, 455–456
Individuals, rôle of, in history: Grundtvig on, 287
Irrational processes and history of ideas, 16 ff.
Isolationism in antiquity, 459 ff.

Judaism, and English nationalism, 81; Grundtvig on, 283 ff.; and Nietzsche, 137 ff., 143

Laws, in history, 356 ff.; "law of nature," usage of term in English ethics, 337–340, physical and moral law, 344–351
Liberalism, and National Socialism, 135
Linguistic science, Grundtvig on, 284
Literary criticism, and economic forces, 241–251, 369–374 (v. Literature)
Literary history, and history of ideas, 14 ff.; and Marxism, 241–251, 369–374; and science, 363 n. 10 (v. Literature)
Literature, and science in the Elizabethan Age, 167 ff.; science and criticism in the neo-classical age, 381–412 (v. Literary history)
Logic: of Aristotle, 180, 385, of continuity and intensity among Ockhamites, 180; of qualitative changes, 181 ff.; of causes, 182; and medicine, 185; of discovery and proof in the School of Padua, 177–206, "natural logic," 221; Lotze's, 440 ff.; Hegel's, 441

Machiavellianism, 321, 495
Magic, and Kepler, 260 ff.
Marxism, and values, 24; and National Socialism, 134, 137; and literary criticism, 241–251, 369–374
Marvelous, use of, in literature in Elizabethan period, 169 ff.
Mathematics, in the School of Padua, 180–184, 194; in Gresham College, 414, 423 ff.; in London, 425; and the English Navy, 430
Mechanistic view of nature, and Copernicus, 113–118; in Galileo, 117; and Neo-Platonism, 114 ff.; and American humanists, 345 ff.; and Wordsworth, *ibid.*
Medicine, and study of Aristotle at Padua, 183, 185; in England, 393, 423 f.; Lotze's psychology and, 442 ff.

Microcosm, man as, 164
Middle Ages, aspects of history of ideas in, 61 ff., 114 ff., 177 ff.
Museums, of science, in 16th–17th centuries, 159 ff., 232 ff.
Mythology, (v. Grundtvig) 290 ff.

Napoleon, influence on ideas in 19th century of, 29
National Socialism, use of Nietzsche, 131–150; and democracy, 134; and liberalism, 135
Nationalism, in Byron, 36; of the Nazis, 135 ff.; genesis of English, 69–94, 504 f.; in France before the Revolution, 95–111; *vs* the Christian and Hellenistic tradition, 249; in English literary criticism, 411 f.
Natural History, in Elizabethan period, characteristics of, 151–167
Nature, multiple meanings of term, 211, 334 ff., 336 ff.; "fidelity to" as aim of art, 209, 212 ff.; senses of 'law of nature,' 336–341; 'natural' *vs* 'artificial' peoples, in Grundtvig, 288 ff.; 'natural appetite' of man in Ficino, 311 ff.; (cosmos) theory of decline of, 75 ff., 382, 386 n. 9, 410 n.; conception of, in Copernicus, 113 ff.; in Leonardo da Vinci, 212; in Renaissance natural history, 156–167; in Wordsworth, 344–351; in American humanists, 344 ff.; (v. also Determinism, Mechanistic view, Teleological view)
Neo-classical age of English literature, science and criticism in, 381–412
Neo-Platonism: in Copernicus, 114; in Leonardo da Vinci, 212; in Ficino, 299 ff.
Nineteenth Century: phases of history of ideas in, 24–37, 134–150, 215–224, 241–251, 281–298, 335–351, 352–361, 369–374, 439–458
Nordic peoples, historic rôle of, Grundtvig on, 292 ff., 298

Pacifism, and Nietzsche, 138
Philosophy: oscillations in, 21; of romantic movement, 35, 37; of Ficino, 299 ff.; of Leibniz, 232; of Lotze and William James, 439–458; and politics, 131 ff.; and race, 132 ff.; and experimental science, 417 ff. (v. also Logic, Mechanistic view, Nature, Nietzsche, Neo-Platonism, Platonism, Pragmatism, Scientific Method, Teleological)
Philosophy of history, Grundtvig's, 281–298; Lotze's and James's, 455; cyclical theory, 20
Physics, of Copernicus, 113 ff.; of Aristotle and Galileo, 181; at Gresham College, 415 ff.; in England, and navigation, 433 ff.
Platonism, and Renaissance science, 182; in Ficino, 299 ff.
Politics, and science in the ancient world, 375; neo-Machiavellism in Humanism, 321; and philosophy, 131 ff.; and race, 132 ff.
Pragmatism, Lotze's influence on William James's, 439–458
Préciosité, in France in 17th century, 225–231; and Euphuism, 225
Progress, idea of: in Bacon, 74 ff.; and 17th century English nationalism, 76 ff.; in Grundtvig, 290 ff.; in science and poetry, 385, 388, 405, 410, 494 ff.; (v. Decline of nature)
Protestantism: and English nationalism, 71; Danish, 282 ff. (v. Theology)
Puritanism, in New England, 119 ff.; and Gresham College, 421, 436 (v. Protestantism)
Psychology, of William James, 439 ff.

Race, idea of, and politics, in Nazi writings, 132 ff.; in Grundtvig, 288 ff.
Rationalism in 18th century, 341
Reason: and Nature, in Wordsworth, 335–351; "Right Reason," 336 ff. (v. Soul)
Religion: importance of religious writings for history of ideas, 59 ff.; and political movements, 79–92, 105, 122,

281 ff.; 'natural religion,' Ficino on, 310 (v. also Beatific Vision, Catholocism, God, Immortality, Theology)
Renaissance: religious writings in English, 59–68; science in, 156 ff.; theories of scientific method, in Italian, 179 ff.; art, 210 ff.; Grundtvig's disparagement of, 285; astronomy, 363
"Romanticism," and classicism, 20; "essence" of, 34, 37; idea of *femme-fatale*, 215; Grundtvig on, 292; ambiguity of term, 335; in Wordsworth, 335–351; and Baconian science, 402; Symposium on, 505

Scholar Ideal, in 17th century, 320–334
Soul, as a substance, 300; Plato, Aristotle, and Kant, 300; Plotinus and Ficino's theory, 301 ff.; and nature in Coleridge, 351 (v. Immortality)
Socialism, in National Socialism, 135; Fourierism in America, 256
Science, in 17th century England, 74–79, 273, 423; and credulity in Elizabethan age, 152–176; in Renaissance, 156 ff., 182; museums of, 232 ff.; Academies of, 233 ff.; Gresham College: Precursor of Royal Society, 404–430; Leibniz's project, 232–240; and literature, 167 ff.; and criticism in neo-classical English literature, 381–412; and navigation, 431 ff.; and history, 352–362
Scientific Method, in School of Padua, 177–206; and medieval era, 177 ff.; in Leonardo, 177; in Galileo, 177, 184; and the Arabs, 178; in the ancients, 178, and the Renaissance humanists, 178; and Aristotle's logic, 180 ff., 385; Newton, 180; "double process," "resolution and composition," 185 ff.; *regressus*, 192; and logic in Zabarella, 195 ff.; and history of science, 381–2; inductive method in Dryden, 385 (v. also Fictionalism)
Scientific Societies, in 17th century, 232, 413 ff., 424
Seventeenth Century, phases of history of ideas in: 59–68, 69–94, 177, 119–123, 225–231, 232–240, 259–280, 320–334, 381–412, 413–438
Sixteenth Century, phases of history of ideas in: 69–76, 113–118, 151–176, 180–206, 208–212, 363–368
Sociology, and history of ideas, 17 ff.; of knowledge, 17
State, and culture in Nietzsche, 144 ff.; Hitler's ideas of, 145 ff.

Teleological conception of nature, in Copernicus, 114 ff.; in Elizabethan naturalists, 162, Ficino, 311 ff.; James, 448
Theology, of American Puritans, 119 ff.; Kepler, 262–266; Donne, 273; Milton, 279 (v. Grundtvig, Ficino, God)
Transcendentalism (New England): 121, 247, 374
Twentieth Century, phases of history of ideas in: 16–23, 131–150, 220–224, 361–2

War, Nietzsche on, 135
Wissensoziologie, 17

NAME INDEX

(NAMES OF CONTRIBUTORS APPEAR IN SMALL CAPITALS)

Achaean League, 52–54
Acton, Lord, 125, 358
Adams, Brooks, 245, 361
Adams, C. D., 487 n. 8
Adams, Charles F., 354
Adams, Charles F., Jr., 39
Adams, Charles K., 355
Adams, George B., 359, 360
Adams, Henry, 245, 354, 356, 360, 361, 510, 513
Adams, Herbert B., 353, 356
Adams, John, 38, 40, 42, 43, 45, 46, 52, 56, 57
Adams, John Q., 39
Addison, Joseph, 249
Aegidius of Viterbo, 317
Aelian, 158, 159
Aeneid, 207, 250, 305
Aeschines, 486 n. 1, 9; 491 n. 66, 67, 68 ff.; 492 n. 92 ff.
Aetolian League, 52
Aignan, St., 231
Ailly, Pierre d', 181
Albert of Saxony, 181
Alexander VII, Pope, 326
Alexander the Great, 193, 195, 317
Alexandrian, 179, 210, 287
Alfred the Great, 504
Alice in Wonderland (Lewis Carroll), 12
Alva, Duke of, 261
American Historical Association, 353 ff., 505
Amphyctionic Council, 47, 49, 52
Anaxagoras, 499
Ancient History (Grundtvig), 281 ff.
Anderson, Paul R., 128
Anderson, Sherwood, 248
Andler, Charles, 131, 149
Angoulême, Marguerite d', 213
Anne, Saint, 217, 218, 219
Anti-Semitism, 134, 137, 143
Apollonius, 205
Aquinas, Thomas, 252
Arber (*English Garner*), 157 n. 13
Archimedes, 179, 205, 206
Ardaillon, E., 486 n. 2
Argenville, Dezallier d', 210 n. 7
Aristotle, 115, 116, 158, 161, 177, 180, 182, 185, 186, 187, 193, 194, 200, 203, 266, 298, 300, 317, 323, 337, 346, 382, 383, 385, 386, 391, 392, 394–397, 399 ff., 495, 499
Armande, 226
Arnold, Matthew, 341
Artz, F. B. 255
Ashmole, Elias, 160, 233
Ashmolean Museum, 160, 233
Atkinson, W. P., 353
Athens, 459 ff., 486 ff.
Augustine, St., 27, 120, 179, 299, 319
Augustus, 50, 285
Aulard, 96
Averroës, 187, 190, 192, 195, 364
Averroists, 180, 192, 197, 300, 317

Babbitt, I., 336, 341, 344, 347, 372
Bacon, Sir Francis, 74, 75, 77, 154, 162, 178, 184, 232, 233, 326, 332, 333, 334, 383 n. 1, 388, 389 n. 17, 403, 404–410, 503
Baeumler, Alfred, 132, 141, 146–148
Baldi, Camillo, 323
Balzac, Honoré de, 216
Bancroft, George, 356
Barker, Richard H., 124
Barlow, Joel, 249
Barlowe, William, 427
Barnes, A. C., 223 n.
Barocius, 204
Baron, Hans, 378
Barrow, Thomas, 389 n. 17
Bartholemew, 162 n. 28
Barzun, Jacques, 123
Bathurst, Dr. Ralph, 418
Bayle, Pierre, 320 n. 7
BEACH, JOSEPH W., *335–351*
Beard, Charles, 361–362
Beaumont, Francis, 385
Becker, A. G., 486 n. 8
Becker, Carl, 358, 361
Beckmann, Johann, 235
Bedwell, William, 428, 429, 432
Bélise, 226
Bellincioni, 211 n. 8
Bellini, 211
Belloni, A., 321 n. 10
Beloch, J., 486 n. 8
Benës, Eduard, 254
Bentham, Jeremy, 281, 342
Beowulf, 281
Berenson, 215, 223
Bergson, Henri, 440
Berkeley, G., 21, 203, 348
Bestor, Arthur E., Jr., 256
Beveridge, A. J., 358
Bible, 166, 171, 288
Bidney, David, 252, 513
Bigelow, R. P., 253
Billi, Antonio, 209
Bismarck, 142, 148, 507
Blackmore, 395–400, 402
Blair's *Rhetoric*, 247
Blanc, Charles, 217
Blasius de Parma, 181
Blavatsky, Mme., 500
Bloomsbury, J., 269
Blundeville, Thomas, 427
Boas, Franz, 375
BOAS, GEORGE, 124, 152 n. 3, *207–224*, 509
Boehnecke, K. G., 486 n. 8
Boethius, 188
Boileau, 225, 227, 229, 230, 401 n. 45
Bolingbroke, Lord, 336
Bolton, Edmund, 424
Boniface, St., 292, 296
Borghini, R., 209
Borinski, K., 321, 324, 331, 332
Borough, William, 425, 433
Borough, Stephen, 425
Bosanquet, B., 440 n. 4
Bottek, E., 486 n. 8
Bougot, A., 487 n. 9
Boulée, Aug., 486 n. 8
Bourne, E. G., 355
Bowers, Fredson T., 375
Bowne, B. P., 455
Boyle, Robert, 236, 382, 389 n. 17, 407, 416, 418, 419
Bradley, F. H., 440
Brahe, Tycho, 260–262, 266–270, 273, 425
Braque, 210
Brédif, L., 486 n. 8
Bredvold, Louis, 384 n. 3
Brégy, de, 228
Brémond, Henri, 60
Brerewood, Edward, 426
Brerewood, Francis, 401
Briggs, Henry, 415, 423, 426–432
Bright, T., 252
BRINTON, CRANE, *131–150*
Brisbane, Arthur, 372
Brocke, Berend Ten, 232
Brooks, Robert C., 125
Brooks, Van Wyck, 374, 510

Brouncker, Lord Viscount, 418, 419
Brown, Harcourt, 413 n. 2, 420 n. 13
Brown, J. L., 252
Browne, Thomas, 159, 166
Brunet, J. C., 322
Bruno, 178
Brunschvieg, L., 500
Brunt, Captain, 253
Bryce, Lord, 25
Buckle, H. T., 354, 357
Budé, G., 487 n. 9
Bunyan, John, 65
Burckhardt, J. C., 211, 230
Burghley, Lord, 425
Burke, Edmund, 247, 510
Burleigh, Walter, 181
Burr, Aaron, 243
Burton, Robert, 75
Burtt, Dr., 33
Burtt, E. A., 206
Bury, J. B., 355, 410 n. 61, 497
Butcher, S. H., 486 n. 8
Butler, Bishop, 512
Butler, Charles, 162
Butler, Robert, 435
Butler, Samuel, 253, 278
Byles, Mather, 253

Cabala, 205
Caesar, Julius, 46
Caird, Edward, 440
Caius, John, 153, 154, 157
Cajetan of Thiene, 181, 192
Calisthius, 165
Callinus, Gilgevis de, 237
Campbell's *Rhetoric*, 247
Camden, William, 72
Canonhiero, Pietro, 323
Capella, Martianus, 512
Carbonari, 25, 254
Carcavi, 206
Carew, Richard, 72
Carlyle, Thomas, 30, 281, 287
Carpenter, Rhys, 509
Casaubon, Isaac, 329
Cassiano de Pozzo, 213
Castelli, B., 199 n. 31
Catena, 204
Catlin, George, 125, 126
Cato, 287
Caxton, William, 60, 62, 63
Cerf, Barry, 336 n. 3
Cervantes, 250
Chaloner, Sir Thomas, 427, 429
Chamberlain, H. S., 132, 134
Chambers, R. W., 60, 62, 67, 504 n. 3
Chancellor, Richard, 425
Chapman, George, 272
Charlemagne, 283
Charles, I (*State Papers, Domestic*), 433 n. 43
Chateaubriand, 336
Chaucer, 509
Chew, Samuel, 158
Cheyney, Ed. P., 361
Chiaramonti, Scipione, 323
Childe Harold (Byron), 26
CHINARD, GILBERT, *38–58*
Cicero, 40, 41, 43, 110, 178, 188, 249, 252, 295, 338, 391 n. 21, 498
Charles, S., 336–337, 342
Clark, Dr. Timothy, 419
Clausewitz, 29
Clemenceau, G., 487 n. 8, 489 n. 36
Clément, C., 217, 218
Clerke, John, 428, 429, 432
Cloché, P., 487 n. 8, 17, 488 n. 26, 490 n. 47
Coffin, C. M., 268, 275
COHEN, MORRIS R., 235, *241–251*, 369, *372–374*, 379
Cohen, I. Bernard, 513
Cohn, E., 332
Coker, Francis W., 125
Coleridge, S. T., 12, 171, 248, 343, 344, 351, 372, 374
Columbus, 330
Comenius, J. A., 421
Comte, A., 499, 502
Congreve, William, 390 n. 18
Constantine, 296
Cope, Mr., 160
Copernicus, N., 113, 128, 177, 184, 262, 266, 268, 363 ff., 381, 387
Corneille, Pierre, 401 n. 45
Cornford, Francis M., 512
Coster, A., 333, 334
Cotin, 227, 229, 230
Coulanges, Fustel de, 358
Coulton, G. G., 126
Cowley, A., 392 n. 25
Cowper, John, 429
Coyer, Abbé, 99, 107
Craig, Hardin, 154, 168, 252
CRAMER, FREDERICK H., *459–493*
Crane, R. S., 407
Crawford, O. G. S., 497
Crébillon, Prosper de, 231
Cremonini, 181, 203
Crivelli, 211
Croce, B., 210, 255, 321, 331, 379
Croiset, M., 486 n. 8, 490 n. 48
Cromwell, 73, 81, 82, 86–90
Crone, Dr., 419
Cudworth, Ralph, 247
Cumberland, R., 336, 337, 342
Cusanus, Nicholas, 184
Cyrano de Bergerac (Rostand), 253, 276
Cysarz, H., 333 n. 55

Dahlmann, F. C., 506, 508
Daiches, D., 253
D'Alembert, 105
Dalencé, 236 n. 7
Dampier-Whetham, Sir William C., 321, 512
Daniel, Samuel, 71, 72, 74
Dante, 12, 29 n. 1, 242, 250
D'Arcy, Rev. M. C., 252
Darwin, Charles, 353, 354, 355, 357, 359, 502
Dausseron, B. H., 213 n. 16
Davies, Prof. G., 65
Davis, John, 425
Deacon, John, 165 n. 34
Dearmer, P., 223 n. 39
Dee, John, 424, 425
DeFoe, Daniel, 248, 253
Dehn, F., 133
Delamain, Richard, 429 n. 32
Delcourt, Marie, 363, 364
Delecluze, 214
Dell, F., 121
Demosthenes, 54, 252, 486 ff.
Dennis, John, 390 n. 18 (v. Gildon)
Denmark, 281 ff.
Dent, A., 65
Descartes, 78, 178, 205, 320, 389 n. 17, 390, 401, 412
Deshoulières, Mme., 230, 231
Desrues, 226, 227
Dewey, John, 127, 254, 379, 439
Digges, Thomas, 425
Dilthey, W., 126, 506–508
Diodorus, 487 n. 15, 490 n. 65, n. 66
Diophantus, 205, 234
Dioscorides, 158
Dodgson, Rev. C., 12
Dollfus, A., 217
Don Juan (Byron), 30
Donne, John, 76, 173, 259–280, v. Kepler
DORAN, M., *151–176*
Doren, Carl Van, 377
DOWNEY, GLANVILLE, *112–113*
Doyle, A. C., 171
Draper, J. W., 361
Draper, Dr. W., 496
Dreiser, Theodore, 243, 248
Drerup, E., 486 n. 8
Dryden, John, 79, 249, 384, 388, 397, 409, 411
Duckett, E., 260
Duhem, P., 367
Dunning, Wm. A., 357, 358
Duracotus, 260, 261, 267, 276, 277, v. Kepler

Dürer, A., 219
Dyer, Sir Edward, 425

Eaker, J. Gordon, 128
Eastman, Max, 377
Eddington, Sir Arthur, 169, 512
Edward the Confessor, 504
Eliot, T. S., 254
Elizabeth, Queen, 72–74, 411, 422, 423, 424, 425, 431
Elliot, Jonathan, 52 n. 9
Elliot, W. Y., 255
Emerson, R. W., 245, 246, 247, 249, 345
Empedocles, 302, 499
Engels, F., 133, 244
Ent, Sir George, 417, 418, 419, 421
Ericksen, J., 270, 271, 275
Erigena, Johannes Scotus, 511
Ermatinger, E., 330, 333
Escuteaux, des, 226, 227
Etten, H. Van, 234
Eubolos, 491 n. 66
Eucken, R. C., 449, 450
Euclid, 206, 249, 364
Eugene, Prince, 240
Euripides, 400 n. 42
Evelyn, John, 419, 431 n. 37, 432 n. 40
Ezzelino, 29

Fabriczy, de, 209
Faerie Queene (Spenser), 174
Faret, N., 330
Farrington, Benj., 375
Faust (Goethe), 250
Favaro, A., 236, 237
Federalist, 42, 52, 54, 55
Feibleman, James K., 126, 254
Félibien, A., 213, 214 n. 18
Ferdinand, Archduke, 266
Ferguson, Adam, 45, 46
Fichet, A., 327, 329
Fichte, J. G., 334, 458
Ficino, Marsilio, 299–319
Fielding, Joseph, 248
Finaeus, Orontius, 425
Fiolxhilda (v. Kepler), 260, 265, 267, 276, 277
Fleming, Abraham, 157 n. 13
Flemming, W., 321 n. 14
Fletcher, John, 385
Fling, F. M., 361
Focke, F., 487 n. 8
Foerster, N., 335, 345, 347
Foffano, F., 321
Fontenelle, 231, 500, 501
Foster, Joseph, 436 n. 51
Foster, Samuel, 417, 418, 421, 437 n. 58
Foucart, P., 487 n. 17, 489 n. 37
Francis I, 209, 212, 214
Francotte, H., 486 n. 8, 17, 490 n. 57
Franklin, Benjamin, 48
Frederick the Great, 137, 254
Freneau, Philip, 249
Freud, S., 220, 221, 222, 241, 371
FRIESS, HORACE L., 125, *506–508*
Frisch, C., 259 n. 3, 262
Frobisher, Martin, 425
Frost, Robert, 510
Fueter, E., 329 n. 37

Galen, 158, 184, 185, 187, 188, 189, 197, 388, 393, 395
Galileo, 116, 117, 118, 177, 178, 179, 180, 183, 196, 199, 200, 205, 206, 263, 266, 268, 269, 271, 277, 381
Gallerani, Cecilia, 211 n.
Garner, J. W., 358
Gassendi, P., 98
Gautier, T., 215, 216, 217, 218, 220
Geiger, Maynard, 511
Gellibrand, Henry, 420 n. 13, 430, 432, 433, 434, 435, 436
Genseric, 29
George, H., 372
Gerard, 154, 156 n. 12 (*The Herball or General Historie of Plants*)
Gerland, Dr. Ernst, 232, 237
Gesner, C., 153, 154, 157, 159, 167
Geyer, F., 486 n. 6
Gibbon, John, 60, 282, 355
Gilbert, Sir Humphrey, 271, 424, 425
Gilbert, William, 427, 433
Gildon, Charles, 390 n. 18, 391, 393, 394, 397, 400, 401
Giocondo, Francesco del, 208 (v. *Mona Lisa*)
Giovio, P., 209
Gitlow, Benj., 377
Glanville, Joseph, 382
Glisson, Dr., 417, 418, 421
Glotz, G., 489 n. 37, 490 n. 57
Gneisenau, von, Count A. W., 506, 507
Gobineau, de, Count J. A., 132, 134
Goddard, Jonathan, 417, 418, 419, 432, 437
Godefroy, 38
Godwin, Parke, 372
Godwin, William, 276, 278, 343, 347
Gœdartis, 237 n. 13
Goethe, 30, 31, 39, 242
Goodman, Godfrey, 76
Gosse, E., 272
Gotschalk, D. W., 512
Gracián, 333, 334
Graf, A., 320
Granvill, George, 390 n. 18
Greaves, John, 420, 423, 428
Greeley, Horace, 372, 373
Green, T. H., 440
Greenlaw, E., 14
Gregory, Pope, 296
Gresham, Sir Thomas, 414, 422, 423, 426, 438
Gresham College, 413–438
Grierson, M., 260
Grimm, J., 331
Groethuysen, Bernard, 513
Grote, G., 486 n. 8
Grotius, 336, 342
Grundtvig, "Philosophy of History" (Malone, K.), 281–298
Gude, M., 486 n. 7
Guericke, Otto von, 236
Guibert, Count de, 103
Guiccioli, Countess, 30
Gunter, Edmund, 429, 430, 432, 433, 434, 435, 437
Gunther, R. T., 158, 160, 233, 262, 263, 264, 266

Haak, Theodore, 418, 420
Haendcke, B., 320 m.
Haertle, H., 133, 136, 144, 146
Hakluyt, Rich., 74
Haldane, J. R. S., 512
Hali, 187, 188
Hall, G. Stanley, 442 n. 7
Hallam, H., 322
Haller, William, 67, 127
Hamann, Johann G., 506
Hamilton, Alexander, 38, 47, 51, 52, 53, 54, 231, 243
Hamlet, 171, 172, 207, 208, 250
Handbook of Ancient History, 281 ff. (Grundtvig)
Hardenburg, 506, 507
Hardy, Thomas, 510
Hariot, Thomas, 270, 271, 274, 275
Harrington, 394 n. 28
Harris, W. T., 440
Harrison, 420 n. 13, 434
Hart, A. B., 359
Haug, O., 133
Hayes, Carlton J. H., 125
Haym, 506
Heath, William, 52
Heaton, Mrs. C., 215, 219
Hegel, 124, 222, 244, 440, 441, 442, 457–458, 502, 507
Heine, 29, 31, 503
Helvetius, 105
Henderson, A. B. Drayton, 255
Henry VIII, 159
Henshaw, Mr., 419

Hercules, 298
Hero, 205
Hetner, H., 321
Hippocrates, 393, 395
Hitler, 25, 133, 135, 513
Hobbes, 337 n. 21, 378–379, 384 n. 3
Hoadley, 41
Hoech, A., 487 n. 17
Hoelderlin, 124, 316
Holbach, Paul H., Baron d', 105
Holder, William, 417 n. 8
HOLT, W. STULL, *352–362*
Homer, 242, 383, 400, 401
Hood, Thomas, 426 n. 20
Hooke, Robert, 236 n. 8
Hooker, Richard (*Ecclesiastical Polity*), 336, 337, 342, 345
Horace, 249, 298, 383, 395, 401 n. 42, 45
Houssaie, Amelot de la, 333
Houssaye, Arsène, 214, 217
Howells, William Dean, 510
Hubbard, E., 215, 219
Huet, P. D., 330
Hughes, M., 175
Hugo of Siena, 184, 189, 190
Humboldt, William von, 506, 507
Hume, David, 21, 22, 440, 444
Hutchinson, Anne, 122
Hutton, C., 234
Huxley, Thomas, 170
Huygens, Ch., 236, 389 n. 17

Inferno, (Dante), 28 n.
Inge, Dean, 496
Invisible College, 416, 421
Irving, Washington, 510
Isocrates, 488 n. 24

Jacobins, 91, 107
Jacopo da Forli, 181, 184, 188
Jaeger, Werner, 123, 488 n. 22, 490 n. 57
James I, 269, 270, 432 n. 41
James, Captain Thomas, 435
James, William, 35 n. 4, 167, 439–458, 513
Jansenists, 105
Jarves, J. J., 220
Jeans, Jas., 169
Jefferson, Thomas, 38, 39, 40, 245
Jesuits, 98, 100, 101, 102
Johannes, M. O., 133
John, St., 217, 218, 222
JOHNSON, FRANCIS R., 168, *413–438*, 425 n. 19, 426 n. 20
Johnson, M., 133
Johnson, Dr. Samuel, 249
JONES, RICHARD F., *381–412*
Jones, Rufus M., 127
Jonson, Ben, 155, 298, 385, 386
Jordan, W. K., 67
Jouquet, P., 486 n. 6
Joyce, James, 169

Kahle, F., 487 n. 17
Kahrstedt, U., 486 n. 8, 488 n. 26
Kame, *Elements of Criticism*, 247
Kant, 124, 126, 220, 300, 343, 440, 444, 446, 447, 502, 507, 513
Keats, John, 242
Kepler, 117, 177, 182, 205, 259–280, 366, 381, v. *Somnium*
Kerchner, J., 490 n. 55, n. 56
Kesser, A., 148 n.
Keynes, G., *Bibliography of John Donne*, 268 n. 16
Kierkegaard, S. A., 281, 496
Kilgrew, Thomas, 395 n. 32
Kipling, Rudyard, 252
Kircher, Athanasius von, 232, 233, 235, 236 n. 11
Klotz, Edith L., 63
KOHN, HANS, *69–94*, 379, 504, 505
Koffka, K., 509
KRAUSHAAR, OTTO, *439–458*
KRISTELLER, PAUL O., 128, *299—319*
Kynaston, Sir Francis, 424

Lacroix, P., 329
Lafenestre, G., 213
La Fontaine, Jean de, 230
Lamb, Charles, 12
Lamprecht, Sterling P., 378
Lanzi, Luigi, 214 n.
Laski, Harold J., 125
Lassalle, Ferdinand, 245
Latimer, Hugh, 65
Lavater, J. K., 215 n. 23, 323 n. 27
Lavisse, E., 212
Lawrence, D. H., 35
Le Bossu, 397, 401, 402
Leda, 219, 222
Leeuwenhock, Anton van, 237, 389 n. 17
Legget, William, 372, 373
Leibniz, 232–240, 320, 512
Leipzig, 133
Lemonnier, 212
Lempicki, S. von, 322 n. 22
Lenin, 145, 245
Leonardo da Vinci, 177, 208 ff., 253
Lerner, Max, 16 n. 126
Leroy, L., 213
Lessing, 334
Leurechon, 234 n. 1
Levey, Harry B., 513
Levy, Dr. Oscar, 135
Lewis, C. S., 10, 11, 13 n.
Lewisohn, L., 241, 371
Lichtenberger, Henri, 131 n. 1, 148, 149
Linacre, Thomas, 423 n. 16
Linnæus, 161
Lister, M., 237
Litz, F. E., 331
Lloyd, Claude, 384 n. 3
Locke, J., 21, 40, 41, 203, 320, 444
Lodge, O., 171
Lomazzo, 209
Longfellow, H. W., 243
Loomis, R. S., 127
Lotze, R. H., 439–458
Louis XII, 209
Louis XIV, 213, 234
LOVEJOY, ARTHUR O., *3–23*, 211, *232 ff.*, 335, 494 ff.
Lovenjoul, S. de, 216
Lowell, J. R., 243, 246, 250
Lucas, E., 215
Lucian, 253, 263, 275, 278
Lucretius, 384
Ludovici, A., 149
Lully, R., 178
Lumley, Baron John, 423
Luther, Martin, 282, 297
Lycian Confederacy, 54
Lycurgus, 44, 106, 107
Lydiard, Hugh, 432
Lyly, John, 73

Mably, 102, 110
Madison, 46, 48, 49, 50, 51, 53
Maestlin, M., 261
Magendie, M., 330
Magie, W. F., 236 n. 6
Malherbe, Fr. de, 225
MALONE, KEMP, *281–298*, *504–505*
Malpighius, M., 389 n. 17
Mandelbaum, M., 362
Manfred, (Byron), 27, 30, 31
Mangin, J., 38
Mann, H., 149
Mann, Thomas, 513
Mannheim, K., 17
Mantz, Paul, 215, 217
Marcus Aurelius, 338
Mariette, P. J., 214 n. 19
Marivaux, Pierre de, 231
Marlianus, Johannes, 182
Marr, John, 434, 435
Marshall, J., 245
Martin, V., 487 n. 9
Martineau, James, 500
Marvell, Andrew, 82
Marx, Karl, 24, 133, 145, 244, 245, 502
Mason, George, 47
Mather, F. J., 252
Matthias, Archduke, 260

Mathieu, G., 488 n. 24
Maugain, 330
Maupeou, 105
Mausolos, King, 488 n. 20
Mayhew, Dr., 40
Mazzini, G., 36, 254
Medieval History, (Grundtvig), 281 ff.
Mein Kampf, (Hitler), 132, 134, 145
Melville, Herman, 253
Mencken, H. L., 147, 149, 251, 331, 372
Mencken, J. B., 331
Mercator, G., 425, 427
Mercers' Company, 423 ff., 426
Merret, Dr., 417, 418
Mersenne, P., 420 n. 13
Merton, Robert K., 17 n. 8
Meyer, R., 132
Méziriac, B. de, 234
Michaud, J. F., 237
Mill, John S., 440, 444, 499
Miller, Perry, 119–122
Milton, John, 40, 82, 83, 84, 86, 276, 278, 279, 342, 407, 509
Mirabeau, Honoré de, 108
Mitchell, W. Fraser, 67
Moffett, 154, 161
Moile, Walter, 390 n. 18
Molière, J., 225, 226, 228, 229, 231, 401 n. 45
Momigliano, A., 486 n. 6
Mommsen, Th., 506
Mona Lisa, 207–224
Monluc, Jean de, 364
Montague, William, 255
Montaigne, Michel de, 213, 255
Montesquieu, Ch. de, 41, 42, 44, 46, 50, 52, 54, 57, 102, 110
Montucla, J. E., 234 n. 1
Moray, Sir Robert, 419
More, Anne, 272
More, Henry, 278, 336, 337, 342, 344, 372
More, P. E., 336, 347
More, Sir Thomas, 75
Morey, C. R., 112
Morhof, D. G., 234 ff.
Morland, Sir Samuel, 235 n. 4
MORNET, DANIEL, *225–231*
Morris, William A., 511
Morveau, Guyton de, 101
Moses, 107, 287, 355
Moslem, 27
Mounier, J. J., 57
Müller, J. von, 506
Müntz, 213 n. 17
Muratorii, L. A., 330 n. 40
Murray, A. T., 252
Murray, D., 232
Musaeum Minervae, 424
Musophilus (Samuel Daniel), 72
Musset, Alfred de, 30, 31
McCurdy, E., 215, 219
McIlwain, Charles, 67
Napier, John, 427 n. 25
Napoleon, 25, 29, 30, 31, 95, 102, 340, 507
National Socialism, 131–150
Naumann, 142
Nedham, Marchmont, 393 n. 27
Needham, Joseph, 512
Neil, Sir Paul, 419
New Atlantis, 75
Newstead Abbey, 25
Newton, Sir Isaac, 178, 180, 185, 198, 381, 388, 389 n. 17, 407
Nicholas of Oresme, 181
NICOLSON, MARJORIE, *259–280*, 253
Niebuhr, B. G., 506
Nietzsche, F., 28, 29, 31, 36, 131–150, 496, 513
Nifo, Agostino, 192, 193, 200, 201
Nitzsch, Carl, 506
Nolanus, 271
Normans, 294 ff.
Norris, F., 249
Northern Mythology, (Grundtvig), 281 ff.
Ockhamites, 180 ff., 182, 205
Oedipus Complex, 220
Oehler, Richard, 133, 138, 145
Olaus Magnus, 175 n. 49
Olynthus, 486 n. 7, 489 n. 38
Ooteghem, J. van, 487 n. 8, 490 n. 57
Oppenheim, M., 433 n. 43
Oppianus, 159
Orations, (Tully), 48
Oresme, Nicholas of, 181
Ornstein, Martha, 413 n. 2
Ortelius, 425
Orus, 159
Osiander, O., 366
Othello, 167, 169
Otis, James, 40
Oughtred, 428, 429 n. 32, 436
Ovid, 159, 393 n. 26
Owst, Dr. G. R., 60, 61
Ozanam, 234 n. 1
Padua, 177–206, 317
Page, Charles, 510
Pagel, Walter, 512
Paine, Thos., 148
PALMER, ROBERT R., *95–111*, 126
Paludanus, Museum of, 233 n. 4
Panofsky, E., 212
Papastavru, J., 486 n. 7
Papin, Denis, 236
Papini, G., 35 n. 4
Pappus, 205
Paradise Lost, 279
Pareto, V., 494, 495
Parmenides, 123
Parrington, V., 241 ff., 369 ff.
Parthenon, 217
Pascal, Blaise, 235, 500
Pater, W., 215, 218, 219, 220
Patterson, 50
Paul, Saint, 293
Paul of Venice, 181, 191
Paulsen, Fr., 321 n. 10
Pavillon, 230
Peirce, C. S., 378, 444
Pell, John, 420 n. 13
Peloponnesian War, 53
Pena, J., 364
Penrose, S. B. L., 332
Percy, H., Earl of Northumberland, 272, 274
Pericles, 53
Perkins, Rev. William, 59, 66
Perrault, Ch., 393 n. 26, 401 n. 45
Perry, R. B., 255, 440 n. 2, 449 n. 15
Petrella, 202
Pett, Phineas, 432
Petty, Sir William, 418, 419
Philip, King of Macedonia, 459 ff., 486 n. 5, 488 n. 24
Philo Judæus, 215
Philochoros, 490 n. 56, n. 63
Philocrates, 491 n. 67, n. 76, 493 n. 95
Philoponus, 193
Phrysius, Gemma, 425
Piccolomini, F., 202
Pickard, A. W., 486 n. 8
Pietro d'Abano, 184, 185, 186, 188
Pinckney, Charles, 47, 51
Pindar, 400 n. 42
Pinnow, H., 254
Pisanello, Vittore, 211
Plato, 120, 123, 161, 179, 299, 300, 301, 304, 308, 384
Platter, T., 157 n. 14, 159
Plattes, Gabriel, 420 n. 13
Pléiade, 213
Pliny, 158, 159, 165, 210, 512
Plotinus, 299, 304, 306, 308, 319
Plummer, 338 n. 26
Plutarch, 48, 110, 260, 263, 276, 278
Podach, 132
Poe, Edgar A., 245, 246, 247
Pokorney, E., 486 n. 8
Polybius, 20, 38–58, 496, 497

Pomponazzi, P., 195, 317
Pope, A., 249, 383, 397, 402, 410 n. 61
Porson, Richard, 281
Porta, Giambattista, 323
Porta, Simon, 195
Porter, L. S., 219
Poussin, Nicolas, 213
Powell, T., 233
Praz, M., 215
Prelude, (Wordsworth), 336, 339, 349, 350
Prescott, William, 247, 373
Prinzhorn, Hans, 132, 145
Proclus, 205
Proteus, 333
Proust, Marcel, 509
Prowe, Leopold, 364
Ptolemaic System, 387
Ptolemy, 36, 113, 116, 269, 364
Puech, A., 489 n. 30
Pufendorf, Samuel, 322, 336, 337, 338
Punic War, 56
Purbach, G., 184
Pymandre, 214
Pythagoras, 114, 116, 117

Quixote, Don, 250
Quinn, P., 255

Rabelais, Fr. de, 213
Racine, Jean, 230
Raleigh, Sir Walter, 74, 167, 272, 273, 274, 425
Ramus, P., 363–368, 428
RANDALL, J. H., *177–206*
Ranke, L. von, 296, 355, 356, 358, 359, 360, 361
Raphael, 209, 213, 216
Rapin, Paul de, 391
Raumer, F. von, 506
Rauschning, 134
Redon, O., 210
Regiomontanus, 184
Régnier-Desmarais, 230, 231
Reichenbaecker, W., 486 n. 6
Reike, E., 322
Renan, E., 334
Renouvier, Charles, 440, 455
Restoration, 384
Reynolds, Mrs., 243
Rheticus, George, 159, 363–368
Rhodes, J. F., 353, 357
Riccobini, A., 202
Richard II, 13
Richtenberger, E., 213
Richter, on Nietzsche, 132
Ridley, Marke, 427
Riehl, on Nietzsche, 132
Rigollot, 213
Riske, Elle, 384 n. 3
Ritter, Paul, 506
Road to Xanadu, 4
Robespierre, Max. de, 108
Robinson, E. A., 377
Robinson, J. H., 305, 361
Roger-Milès, L., 208, 212, 213
Rolbiecki, John J., 254
Rolland, 101
Rollin, Charles, 46
Rome, 288 ff.
Romeo and Juliet, 172
Rooke, Lawrence, 419, 421, 437
Rose, G. B., 219
ROSEN, EDWARD, 128, *363–368*
Rosenberg, 132
Rosenblatt, L., 219
Ross, E. A., 510
Rousseau, J. J., 24, 99, 101, 106, 107, 111, 336, 502
Roussel, P., 486 n. 7
Royal College of Physicians, 423
Royal Society, 413–438, 383–384, 388, 389 n. 17, 390, 408, 419, 420, 421, 426
Royce, Josiah, 440
Rudolf, Prince, 260
RUSSELL, BERTRAND, *24–37*, 494, 500, 501, 512
Rutherford, Lord, 127, 512
Rye, W. B., 157 n. 14
Rymer, Thomas, 385, 390–392, 400 n. 42

Sacrobosco, Johannes de, 509
Salisbury, Earl of, 269
Salter, W. M., 131, 149
Sandys, J. E., 322
Santayana, George, 123, 501
Sarton, George, 237 n. 14
Scaliger, J. J., 329
Scarbrough, Sir Charles, 417
Schaefer, A., 486 n. 8
Schapiro, M., 219
Scharnhorst, 506, 507
Schelling, F. W. J., 348
Scherer, Wilhelm, 506, 508
Schiller, J. C. F. von, 334
Schlegel, Friedrich, 247
Schleiermacher, Fr., 506
Schlosser, F. C., 506, 508
Schmidt, J., 330, 506
Schmoller, 506
Schneider, A., 333
SCHNEIDER, HERBERT W., *119–122*
Schopenhauer, Arthur, 220
Schouler, J., 357
Schulze, Fr., 322
Schwartz, E., 489 n. 30
Schwenter, D., 234
Scotists, 178, 180, 182, 183, 194
Scott, J. F., 417 n. 8
Scott, Sir Walter, 510
Scudéry, Mlle, de, 225, 226, 228
Séailles, G., 215
Sedgwick, Theodore, 52
Seneca, 298
Serre, J. P. de la, 226
Servan, Joseph, 103
Settalas, 232
Sforza, Ludovici, 211
Shakespeare, William, 12, 59, 126, 169, 170, 172, 173, 208, 242, 243, 272, 298, 384, 390, 394, 402, 407, 411
Shaw, G. B., 147, 149, 243
Shelley, Percy B., 27, 32, 138, 242, 281, 496
Shelley, Mrs., 32, 37
Shephard, W., 253
Shryock, R. H., 255
Sidney, Sir Philip, 425
Sigwart, Ch., 455
Simms, William G., 246
Simplicius, 193
Simpson, E., 273
Slingsby, 419
SMITH, BERNARD, 241–251, *369–372*
Snyder, Carl, 377
Smith, D. E., 235
Smith, G., 356
Smith, L. P., 269
Smith, Sir Thomas, 72, 426
Society of Antiquaries, 424
Socrates, 384
Solinus, 159
Solomon, 287
Solon, 47, 287
Somaize, 228
Somnium, (Kepler), 259–280
Sophocles, 400 n. 42
Sparta, 47, 53
Spedding, 332 n. 51
Spelman, E., 43
Spencer, H., 499, 500
Spenser, E., 174, 175, 242, 385, 411
Spengler, O., 496, 497
Spinoza, B., 252, 320, 513
Spirit of Laws, 42, 46
Sprat, Thomas, 78, 382, 388 n. 16, 390, 403, 406, 408
Spingarn, 372
Ssymink, P., 322
Stammler, W., 320
Stamp Act, 40
Stauffer, D. A., 219
Stearns, F. P., 219
Stein, 506, 507
STEINER, ÁRPAD, *320–334*
Stendhal, 29, 214
Sterry, P., 15
Stevens, Edward, 432
Stevens, H., 270, 272
Stimson, Dorothy, 413 n. 2,

416 n. 7, 421 n. 14, 436 n. 50
Stirling, J. H., 440 n. 3
Stirner, Max, 147
Stocker, Adolf, 134
Strindberg, J. A., 35
Strong, E. W., 205, 206
Stroup, T. B., 384 n. 3
Suisseth, 181
Sumner, W. G., 510
Swammerdam, 237
Sweetser, M. F., 214
Swift, J., 42, 43, 253, 389, 397
Swinburne, A. C., 219
Symonds, J. A., 320

Taine, H. A., 216, 217, 244
Tasso, 385
Taylor, R. A., 222
Teeter, L., 11 n.
TEGGART, F. J., 252, 361, *494–503*
Telesio, 203
Tempest, (Shakespeare), 173
Temple, Sir William, 389, 390, 408
Terence, 385
Terasson, Abbé, 401, 402
Theophrastus, 158
Thevenot, 237 n. 15
Thomas, M. H., 254
Thomas Aquinas, 252, 337, 338
Thomasius, 322, 333
Themistocles, 291
Thomists, 180, 182, 183, 194, 195
Thomistius, 193
Thoreau, H. D., 243
Thorndike, Lynn, 413 n. 1
Thucydides, 497
Tibullus, 393 n. 26
Tillyard, E. M. W., 13 n.
Tindal, M., 336, 337
Tintern Abbey, (Wordsworth), 347, 349
To My Sister, (Wordsworth), 343
Tobin, J. E., 253
Tocqueville, Alexis de, 376
Tolland, J., 336
Tollius, Cornelius, 323
Tolstoy, Leo, 29
Tomitanus, B., 195, 198
Topsell, Edward, 152, 154 ff., 159
Toynbee, Arnold J., 127, 496
Tradescant, John, 158, 160, 233
Treitschke, 132, 506
Treves, P., 487 n. 8, n. 24
Trismegistus, 114
Trissotin, 227, 229, 230
Tudor, *Life of James Otis*, 41 n. 3
Tully, 40
Turner, F. J., 353
Turner, Peter, 423
Turner, William, 154, 156 n. 12 (Herbal), 167
Turgot, Baron de, 106
Twain, Mark, 250
Tyler, H. W., 253

Ulysses, 171, 250
Urban the Averroist, 190
Urban VIII, Pope, 326

Vagts, A., 362
Vaihinger, Hans, 132
Valerianus, 323
Valerius, M., 45
Valéry, P., 223
Vasari, Giorgio, 209–210, 211, 212, 214, 215, 221, 222
Vattel, E., 336, 337
Veblen, Thorstein, 125
Vedel, V., 333
Vente, S., 321
Venturi, A., 208
Vergil, 295, 305, 385, 389 n. 21, 402 n. 45
Verne, J., 278
Vico, 499
Viereck, Peter, 513
Villari, P., 358
Villedieu, Mme. de, 227, 229
Virgin and Saint Anne, 209
Vision of Piers Plowman, 61
Vives, Juan, 178
Vleeschauwer, H. J. de, 255
Volkerstorff, Baron, 265, 266
Voltaire, 97, 98, 139, 148, 231

Wagner, Richard, 36, 132, 513
Walch, J. G., 334
Waldberg, M. von, 321, 333
Walker, John, 165 n. 34
Waller, Edmund, 82, 392 n. 25
Wallis, John, 416, 417, 418–420, 428, 437
Walsh, William, 382 n. 25
War and Peace, 29
Ward, Lester F., 124, 510
Ward, John, 422, 426 n. 21, 437 n. 59
Ward, Seth, 428
Washington, George, 18
Weber, Carl J., 510
Webster, Daniel, 121
Webster, John, 382
Weigel, E., 238 n. 20
Weil, H., 486 n. 7, 8
Weise, C., 330
Weld, John, 423, 424, 425
Wells, H. G., 278
Wells, H. W., 124
Wells, John, 430, 431 n. 37, 432, 433, 434, 436, 437
Wendland, P., 488 n. 24
Weniger, Erich, 506
Wesley, C., 281
Wesley, J., 281
West, A. B., 486 n. 7
Westlake, H. D., 489 n. 37
Whewell, William, 498
White, A. D., 357
White, Helen, 65
White, Lynn, Jr., 513
Whitehead, A. N., 501
Whitman, Walt, 243, 249
WIENER, PHILIP P., *232–240*, 255
Wieser, F., 206
Wilcox, E. W., 243
Wilkins, M. E., 253, 278
Wilkins, John, 416, 417, 418, 419, 421 n. 14, 437
Willard, Dr., 52
Willard, Oliver, 169
William the Conqueror, 294
Williams, Clare, 157 n. 14
Willis, Dr., 389 n. 17, 418
Willmann, O., 324
Winckelmann, J. J., 334
Wingate, Edmund, 437 n. 58
Wingfield-Stratford, 504, 505
Wolf, A., 236
Wolfe-Howe, M. A. de, 357
Wolfson, Harry A., 513
Wollaston, W., 336, 337, 338, 342
Wood, Anthony, 416, 431 n. 37, 435 n. 49, 436 n. 52
Wordsworth, William, 335–351
Wotton, H., 269, 270
Wotton, William, 388 n. 16, 389, 391 n. 21, 393 n. 29, 401 n. 43, 402 n. 45, 408
Wren, C., 419, 421, 422, 437
Wright, Edward, 427, 428, 432 n. 42
WRIGHT, LOUIS B., *59–68*, 168
Wright, W., 149

Yates, F., 272
Young, Edward, 402–407

Zabarella, 184, 195 ff.
Zarathustra, 29, 135, 138, 139
ZILSEL, EDGAR, *113–118*
Zimara, 194, 195
Zoroaster, 139
Zweig, Stefan, 124

JOURNAL OF THE HISTORY OF IDEAS, INC.

The purposes for which the JOURNAL OF THE HISTORY OF IDEAS was founded are: to foster studies which will emphasize the inter-relations of several fields of historical study—the history of philosophy, of literature and the arts, of the natural and social sciences, of religion, and of political and social movements; to afford a medium for the publication of researches which are likely to be of common interest to students in different fields; to bring together periodically or make available otherwise such studies, and to promote greater collaboration among scholars in all the provinces of intellectual history.

The American Philosophical Society and the American Council of Learned Societies (through its Committee on the History of Ideas) have both contributed substantially to the initiation, promotion and planning of the project.

OFFICERS

ARTHUR O. LOVEJOY, *President*. GILBERT CHINARD and JOHN HERMAN RANDALL, JR., *Vice Presidents*. PHILIP P. WIENER, *Secretary*. JOSEPH L. GREENBERG, *Treasurer*.

BOARD OF DIRECTORS 1939–40

HARRY J. CARMAN
GILBERT CHINARD
MORRIS R. COHEN
MARK EISNER
JOSEPH L. GREENBERG
JOSEPH J. KLEIN
ARTHUR O. LOVEJOY
MARJORIE H. NICOLSON
HARRY A. OVERSTREET
JOHN HERMAN RANDALL, JR.
DONALD A. ROBERTS
ORDWAY TEAD

The Sustaining Fund of the JOURNAL OF THE HISTORY OF IDEAS consists at present of an initial fund provided by the *Research and Publication Fund* of the College of the City of New York (the fund established in 1939 by the Class of 1912 and increased by the Hon. Mark Eisner), and of contributions provided by individuals or institutions. All contributions to the Sustaining Fund of the Journal of the History of Ideas, Inc. will be gratefully acknowledged, and contributions of $25 or more will confer sustaining membership on the donors under the By-Laws of the Corporation. Contributions to this Fund are exempt from income tax.

Contributors to the Sustaining Fund

Research and Publication Fund established by the Class of 1912, College of the City of New York.
Hon. Mark Eisner, Co-Guarantor of the Sustaining Fund.
Dr. Joseph J. Klein, Life Subscriber.
Trustees of Smith College, Sustaining Member.
University of Cincinnati, Sustaining Member.
Alexander Sachs, Esq., Sustaining Member.
Sidney Schreiber, Esq., Sustaining Member.
Professor Charles A. Beard, Donor.
Dr. Blanchard W. Means, Donor.
A. A. Imberman, Esq., Donor.